

REVIEW ARTICLE

Phytotherapeutics: an evaluation of the potential of 1000 plants

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SUMMARY

Objective: The aim of this review is to evaluate and summarize the available scientific information on the commonest plant extracts marketed in Western countries. In view of the intense, ongoing search for new plant extracts with powerful anti-inflammatory activity, we paid particular attention to this topic. The aim is to provide broad coverage of as many potentially useful plants as possible and then to focus on those with the greatest therapeutic potential.

Methods: Our bibliographic sources were the SciFinder databases: CAPLUS, MEDLINE, REGISTRY, CASREACT, CHEMLIST, CHEMCATS (update to October 2007). In order to assess the value of clinical trials, we focused a specific search on clinical investigations concerning nine plants with the most trial data, viz., *Althaea officinalis*, *Calendula officinalis*, *Centella asiatica*, *Echinacea purpurea*, *Passiflora incarnata*, *Punica granatum*, *Vaccinium macrocarpon*, *Vaccinium myrtillus*, *Valeriana officinalis*. This was carried out in several databases (update to June 2008): ISI Web of KnowledgeSM (ISI WoK), SciFinder (CAPLUS, MEDLINE, REGISTRY, CASREACT, CHEMLIST, CHEMCATS) and PubMed (indexed for MEDLINE).

Results: Our survey covers roughly a 1000 plants, although clinical trials have been published only for 156 plants supporting specific pharmacological activities and therapeutic applications. However, for about half of the plants, *in vitro* and *in vivo* studies provide some support for therapeutic use. For one-fifth of the plants included in our search, only phytochemical studies were

found. Their properties and indications were often attributed to the presence of certain compounds, but no evidence concerning the activities of the whole extracts was presented. We found that for about 12% of the plants, currently available on the Western market, no substantial studies on their properties had been published, while there was strong evidence that 1 in 200 were toxic or allergenic, so that their use ought to be discouraged or forbidden. Nine plants had considerable evidence of therapeutic effect, viz., *A. officinalis*, *Calendula officinalis*, *Centella asiatica*, *E. purpurea*, *Passiflora incarnata*, *Punica granatum*, *Vaccinium macrocarpon*, *Vaccinium myrtillus*, *Valeriana officinalis*.

Conclusion: The present review provides a baseline on the level of evidence available on many herbal preparations and should be of help to those intending to research further on these topics.

Keywords: clinical studies, evidence-based medicine, medicinal plants, phytotherapy, plant extracts

INTRODUCTION

Phytotherapy is considered as a complementary approach for treating and preventing disease; although well grounded in medical tradition, it often lacks proper scientific validation. Rational use of phytopharmaceuticals should be supported by proper laboratory investigations and clinical trials. The often-repeated statement that herbal extracts, while usually exerting a broad spectrum of effects, show fewer undesirable ones than the single active substances is an old tale that has been substantiated in only a few cases. Many publications on the subject claim that phytotherapeutics are especially suitable for long-term treatment of chronic

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diseases, in geriatric and convalescent patients, for follow-up treatment, and in the prophylaxis of infectious, degenerative and metabolic diseases. It is unfortunate that these claims are often taken for granted. The actual state of the art could be made more scientific by proper evaluation as well as the application of innovative research such as genomics, proteomics and metabolomics (1).

Phytotherapy also has a long standing in veterinary practice, often in the form of remedies that are not evidence-based in relation to quality, efficacy, and safety, or in terms of well-defined dose/effect relationships. The supporting evidence should include well-controlled trials, including placebo-controlled (PC) trials, where appropriate, and bioavailability and pharmacokinetic studies. The pressing need for such validation is highlighted by the current, steady growth of the world market for phytopharmaceuticals, with an estimated turnover of US \$12.4 billion in 1995 (2). Today, the herbal industry with a turnover of about US \$62 billions retains strong growth potential (3). In US alone, sales of herbal supplements, including dietary supplements and functional foods, in 1998, increased by 101% within 1 year to a total of US \$587 million (2). The World Bank reported that trade in medicinal plants, botanical raw materials and drug products, was growing at an annual rate of 5–15% (3, 4). Nevertheless, Nature's biodiversity in potential herbal remedies remains largely unexplored (5).

We present a detailed survey of available scientific information on the commonest plant extracts marketed in Western countries. As our aim was to record the state of the art, our literature search was extended to cover roughly 1000 plants. On the basis of our broad comparative investigation, we attributed a ranking value (–1 to 3) to each plant to express the weight of factual knowledge available on it.

MATERIALS AND METHODS

Our bibliographic sources were the SciFinder databases: CAPLUS, MEDLINE, REGISTRY, CASREACT, CHEMLIST, CHEMCATS (update to October 2007). We used the search words as the Latin name and the common trivial name of the plant, then we refined the results by using 'pharmaceutical', 'therapeutic', 'activity', 'biological', 'medicinal' or 'clinical trial' as topics. English was

selected as the document's language, and paper and review as document types. Patents were not reviewed.

In order to assess the data in more detail, we focused the search on clinical investigations concerning nine plants with the most data, viz., *Althaea officinalis*, *Calendula officinalis*, *Centella asiatica*, *Echinacea purpurea*, *Passiflora incarnata*, *Punica granatum*, *Vaccinium macrocarpon*, *Vaccinium myrtillus*, *Valeriana officinalis*. This was carried out in several databases (update to June 2008): ISI Web of KnowledgeSM (ISI WoK), SciFinder (CAPLUS, MEDLINE, REGISTRY, CASREACT, CHEMLIST, CHEMCATS) and PubMed (indexed for MEDLINE). On ISI WoK, we searched by using the Latin names of plants and 'clinical trial', 'trial', 'clinical' or 'clinical study' as topics, English and German as languages. On SciFinder, we searched by using the Latin names or the common names of plants; we then refined the results by using 'clinical trial', 'trial', 'clinical' or 'clinical study' as Topic or Clinical Trial as Document type, and English as language. We searched on PubMed by using the Latin names of plants and the following limits: Humans; Clinical Trial, Meta-Analysis, Randomized Controlled Trial as Article type; (English, German, French and Italian as languages). Clinical studies concerning mixtures of extracts and homeopathic remedies were not reviewed.

RESULTS AND DISCUSSION

It is well known that the action of a plant extract (phytocomplex) may substantially differ from that of the pure active molecules used together. Under these circumstances, the search for the active principles in a given plant extract may be unrewarding except for pharmacological interest. The complexity of plant extracts makes the development of evidence-based phytotherapy a difficult task that requires a huge analytical effort and manufacturing skills to produce well-defined, standardized phytopreparations. To the pharmacologist, phytomedicine sets new challenges towards understanding the effects of complex mixtures on biochemical processes in health and disease.

From our survey, an interesting overview emerged as shown in Figs 1 and 2. Only for 156 plants clinical trials have been published

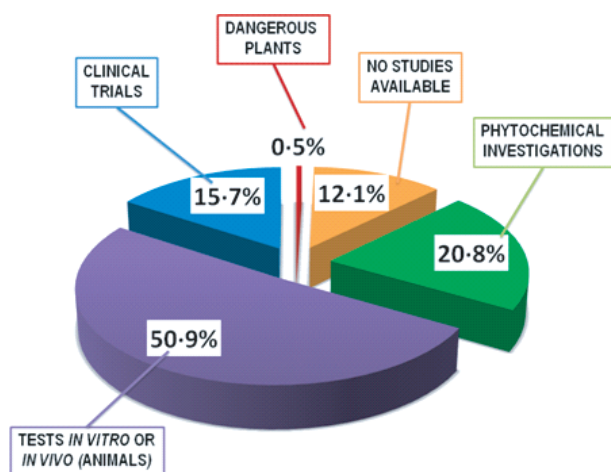


Fig. 1. Types of study performed on the commonest plant extracts being marketed in Western countries.

supporting specific pharmacological activities and therapeutic applications. For half of the approximately 500 plant extracts, *in vitro* and *in vivo* studies provide some validation of their uses, although clinical trials were lacking. For one-fifth of the plants included in our search, only phytochemical studies were found, and their properties and applications were often attributed to the presence of certain compounds, but no evidence concerning the activities of the whole extracts was available.

We found that about 12% of the plants currently on the Western market had no substantial published scientific studies on their properties and about 1 in 200 were toxic or allergenic, so that their use ought to be discouraged or forbidden.

For each category surveyed, a full list is available in Tables S1 and S2. Figure 2 shows that most

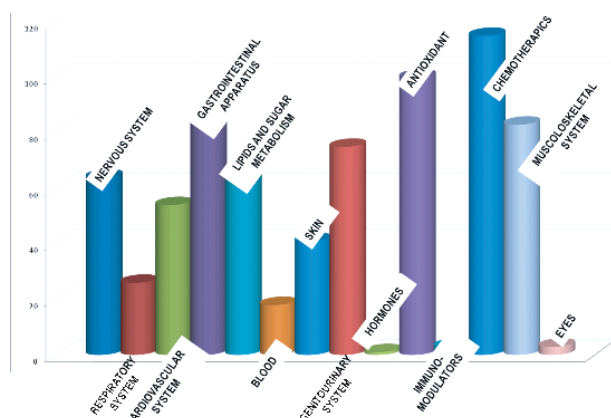


Fig. 2. Topics of investigation in clinical trials of 156 plants.

clinical trials have focused on antimicrobial (antibacterial, antimycotic, antiviral) properties, followed by antioxidant and anti-inflammatory effects.

We reviewed all available published data on plants for which anti-inflammatory activity was claimed (for a total of 215 plants) in order to assess a ranking based on factual knowledge. As shown in Fig. 3, the highest percentage (64%) of plants had rank 2, with only *in vitro* and *in vivo* studies supporting their uses as anti-inflammatory remedies. It is, however, worth mentioning that several clinical trials failed to demonstrate activity for one-third of the plants.

It is disconcerting to find that the widespread use of some phytopreparations is unsupported by any scientific dose/effect assessment, and relevant pharmacokinetic and pharmacodynamic information. For practical purposes, we focused a specific search on clinical investigations concerning nine plants of the highest ranking, viz., *A. officinalis*, *Calendula officinalis*, *Centella asiatica*, *E. purpurea*, *Passiflora incarnata*, *Punica granatum*, *Vaccinium macrocarpon*, *Vaccinium myrtillus*, *Valeriana officinalis*. Tables 1–11 summarize the most recent clinical trials on these plants.

The second study that employs a mixture of natural extracts can hardly be included in a validation protocol for the use of *A. officinalis*.

In 2007, Miyasaka *et al.* (44) published a review on randomized and quasi-randomized controlled trials of *Passiflora incarnata* in the treatment of anxiety disorder. They presented the results of two

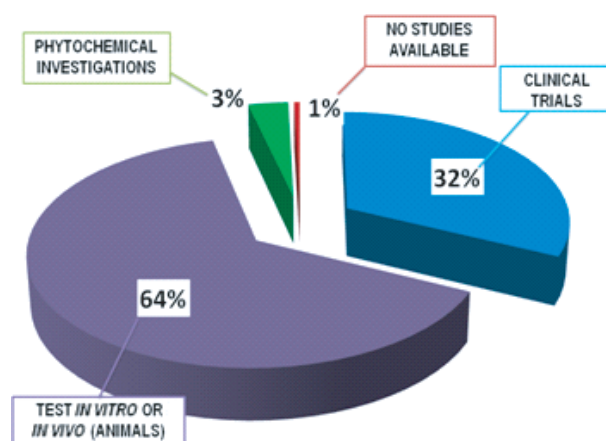


Fig. 3. Ranking subdivision of plants with anti-inflammatory properties.

Table 1. *Althaea officinalis*

References	Object of study	Number of participants	Study type	Preparation, dose, duration of treatment	Outcome	Comments and limitations
6	Treatment of the cough as side effect of ACE inhibitor drugs	60 patients (T = 30, P = 30)	Randomized, double-blind, PC	T = 20 mg of <i>A. officinalis</i> in 20 drops three times daily. Duration of study = 4 weeks	Mean cough score in T group 2.66 + 0.95 (before treatment) and 1.23 + 1 (after treatment). No significant change in cough scores was found in P group. Eight patients showed almost complete cough suppression in T group, whereas only one patient in P group	There was a significant cough reduction with <i>A. officinalis</i> . Studies to determine whether <i>A. officinalis</i> reduces ACE-induced cough are recommended
7	Treatment of Old World cutaneous leishmaniasis	171 patients (T1 + P = 86, T2 + P = 85)	Double-blind randomized, comparison with meglumine antimoniate	T1 + P = pure extracts mixture named Z-HE. Time: 5 days (placebo i.v. 20 days). T2 + P = Glucantime 15–20 mg/kg/day i.v. (topical placebo). Duration of study = 20 days	Complete cure was observed in 64 patients, partial cure in 10 patients, and failure in 12 patients	For Glucantime group, complete cure was observed in 23 patients, partial cure in 12 patients, and failure in 50 patients

T1, T2, different treatments; P, placebo; Z-HE, pure extracts mixture of *A. rosa*, *A. officinalis*, and members of Leguminosae, Faliaceae, Malvaceae, and Lythraceae; PC, placebo-controlled.

Table 2. *Calendula officinalis*

References	Object of study	Number of participants	Study type	Preparation, dose, duration of treatment	Outcome	Comments and limitations
8	Epithelialization of venous ulcers in the lower leg	34 (T = 21, with 33 venous ulcers, P = 13, with 22 venous ulcers)	Comparative study	T = marigold extract ointment, P = saline solution dressings, posology = twice a day Duration of study = 3 weeks	In T group, the total surface of all the ulcers decreased by 41.7% compared with 14.5% in P group. A complete epithelialization was observed in seven patients (T), and four patients in P group	Statistically significant acceleration of wound healing (venous ulcer epithelialization). Results are preliminary
9	Prevention of acute dermatitis induced by X-ray irradiation at the onset radiotherapy	254 (T1 = 126, T2 = 128)	Comparative study, randomized	T1 = calendula (Pommade au Calendula par Digestion, Boiron Ltd), T2 = trolamine (Biafine, Genmedix Ltd), twice a day Duration of study = until radiotherapy completion	The occurrence of acute dermatitis of grade 2 or higher was significantly lower (41% vs. 63%) with the use of calendula than with trolamine	Calendula is highly effective for the prevention of acute dermatitis, it should be proposed for patients undergoing postoperative irradiation for breast cancer

T1, T2, different treatments; P, placebo.

Table 3. *Centella asiatica*

References	Object of study	Number of participants	Study type	Preparation, dose, duration of treatment	Outcome	Comments and limitations
10	Effect on cognitive function of healthy elderly volunteers	28 (P, T1, T2, T3)	Randomized, PC, double-blind study	T1 = 250, T2 = 500, T3 = 750 mg, once daily Duration of study = 2 months	T3 treatment enhanced working memory and increased N100 component amplitude of event-related potential. Improvements of self-rated mood were also found in <i>Centella asiatica</i> treatment	Attenuation of age-related decline in cognitive function and mood disorders. The mechanisms underlying these effects require further investigation
11	Treatment of oedema and increased CF in venous hypertension	T1 = 20, T2 = 20, P = 12 (with venous hypertension); T3 = 10 (normal subjects)	Clinical, prospective, PC, randomized, dose-ranging trial	T1 = TTFCa 60 mg thrice daily, T2 = 30 mg thrice daily; T3 = 60 mg thrice daily Duration of study = 4 weeks	TTFCa treatment gave a significant decrease of CFR, AC and AET time. No significant change was observed in the P group and in normal subjects treated with TTFCa	180 mg/day was more effective in improving symptoms and CFR
12	Treatment of diabetic microangiopathy	50 (T = 30, P = 10, C = 10)	Clinical prospective PC randomized trial	T = TTFCa 60 mg twice daily Duration of study = 6 months	Significant improvement of microcirculatory parameters in patients treated with TTFCa. RF decreased, VAR improved. PO ₂ increased and PCO ₂ decreased. The abnormally increased capillary permeability decreased	Improvement of microcirculation and decrease of capillary permeability
13	Prevention of oedema and microcirculation alterations during long flights	66 (T = 33, P = 33)	Randomized PC study	P = no drug or other treatment, T = TTFCa 60 mg thrice daily. Treatment = 2 days before the flight, the day of the flight, and for an other day after the flight	A progressive increase in CO ₂ , RAS, and oedema score and a progressive decrease in flux and venoarteriolar response with flying time. Alterations of microcirculation and oedema during the flight were weaker in the T group.	Useful for patients prone to oedema and microcirculation disturbances during long flights

Table 3. (Continued)

References	Object of study	Number of participants	Study type	Preparation, dose, duration of treatment	Outcome	Comments and limitations
14	Improvement of the microcirculation in venous hypertension and microangiopathy	40 (T = 22, P = 18)	Prospective, PC, randomized trial	T = TTFFCA tablets, 60 mg twice daily Duration of study = 8 weeks	A decrease in RF and RAS was observed in T group. The decrease in capillary filtration was associated with improvement in signs and symptoms	No side effects were observed. Venous microangiopathy was improved by TTFFCA treatment
15	Part I: effects of TTFFCA on different types of arterial plaque. Part II: effects of TTFFCA on hypoechoic-echolucent plaques	(I) ITT = 58, TT = 47 (24 with hypoechoic, 23 with hyperechoic plaques) (II) 87 (T = 43, P = 44)	(I) pilot study (II) prospective, randomized, PC trial	(I) T = TTFFCA 60 mg tablets thrice daily (II) TTFFCA 60 mg tablets thrice daily Duration of studies = 12 months	(I) GSM increased in the hypoechoic group, minor increase in GSM in the hyperechoic group (II) a significant increase in GSM in the T group, improvement in texture and a non-significant decrease in stenosis. No changes were observed in the P group	Events were observed in 6.5% of patients in the TTFFCA group and in 11% in the control group. Positive action of TTFFCA on the stabilization of hypoechoic, low-density carotid plaques
16	Microcirculatory effects of TTFFCA in chronic venous hypertension	40 (T = 20, P = 20)	Prospective, randomized PC study	T = TTFFCA tablets, 60 mg twice daily Duration of study = 6 weeks	Decrease in RF (29%) and increase in venoarteriolar response (52%) in T group; PO ₂ was increased (7.2%) and PCO ₂ decreased (9.6%). Relevant decrease in leg volume (1.3% volume variation)	The effects of TTFFCA are observed in a limited sample of patients
17	Improvement of microcirculation in diabetic microangiopathy and neuropathy	T = 50 (diabetic), 50 (diabetic without neuropathy), = 40 (healthy)	Prospective, PC, randomized study	T = TTFFCA tablets, 60 mg twice daily, P = similar tablets Duration of study = 2 months	In the neuropathy group: decrease in RF (38%) and RAS (28%), decrease in oedema. In patients without neuropathy decrease in RF (22%) and RAS (9.5%), increase of VAR (22.7%). The variations in normals and the progressive deterioration in untreated patients in both groups indicates the difference between T and P	TTFFCA effects on flux, ASR and oedema are important in early stages of microangiopathy to avoid progression to clinical stages

Table 3. (Continued)

References	Object of study	Number of participants	Study type	Preparation, dose, duration of treatment	Outcome	Comments and limitations
18	Effects of different doses of TTFCa in patients with venous hypertensive microangiopathy	ITT = 99, TT = 89 (T1 = 33, T2 = 29, P = 27)	Single-blind, PC, randomized study	T1 = TTFCa 120 mg daily, T2 = 60 mg daily	Significant difference between drug-treated groups and P group, higher for 120 mg daily and lower for 60 mg daily dose of TTFCa. Transcutaneous PO ₂ -PCO ₂ measurements significantly modified by TTFCa while no variation detected in the P group	Doses as 120 mg daily may be safely used in venous hypertension
19	TTFCa effects on modulation of collagen production and on the echogenicity of echolucent plaques at the femoral bifurcation	50 (T = 26, P = 24)	Prospective, PC, randomized study	T = TTFCa 60 mg thrice daily. Antiplatelet agents in all patients; cholesterol-lowering agents (34% of T group, 36% of P group)	GSM increased from 14 to 22.8 in the T group and from 14.3 to 15 in controls. No significant changes in texture observed in controls while a qualitative increase in homogeneity was observed in the T group. Plaque size showed a median increase of 23% in controls, less in the T group (7%)	Positive action of TTFCa on the stabilization of hypoechoic, low-density femoral plaques
20	Anxiolytic activity in healthy subjects	40 (T = 20, P = 20)	Double-blind, PC randomized	Duration of study = 12 months T = single 12 g orally administered dose	Compared with placebo, <i>Centella asiatica</i> significantly attenuated the peak ASR amplitude 30 and 60 min after treatment, showing anxiolytic activity. No significant effect on self-rated mood, heart rate, or blood pressure	Preliminary findings
21	Effect on venous insufficiency	87 (T1, T2, P)	Placebo double-blind study	T1 = FTTCa 30 mg bid, T2 = 60 mg bid Duration of study = 60 days	RF, transcutaneous PO ₂ and PCO ₂ improved as did the abnormally increased RF, PCO ₂ decreased and PO ₂ increased in comparison with values measured at inclusion. Efficacy of FTTCa in venous hypertensive microangiopathy	Effects of FTTCa appear to be dose-related

Table 3. (Continued)

References	Object of study	Number of participants	Study type	Preparation, dose, duration of treatment	Outcome	Comments and limitations
22	Effects on CFR, AC and AE in patients with venous hypertension and normal subjects	T1 = 20, T2 = 20, P = 12, T3 = 10 (normal subjects)	PC open study	T1 = TTfCA 60 mg t.i.d., T2 = 30 mg t.i.d.; T3 = 60 mg t.i.d. Duration of study = 4 weeks	A significant decrease in CFR, AC, and AECT time in T group (greater in the higher dose group). No significant change in the P and T3 group. Symptoms were also significantly improved in T1 and T2 groups according to the dose. No significant changes were observed in the P group	
23	Effects on venous insufficiency of the lower limbs	94 (T1, T2, P)	Multicentre, double-blind vs. placebo study	T1 = TECA 120 mg/day, T2 = 60 mg/day Duration of study = 2 months	A significant difference in favour of TECA was shown for the symptoms of heaviness in the lower limbs and oedema. The venous distensibility was improved for the TECA groups but aggravated for the P group	

CF, capillary filtration; CFR, capillary filtration rate; AC, ankle circumference; AE, ankle oedema; AET, ankle oedema coin tester; AECT, ankle oedema coin tester; ASR, acoustic startle response; RE, flux at rest; VAR, venoarteriolar response; RAS, rate of ankle swelling; TTfCA, total triterpenic fraction of *Centella asiatica*; TECA, titrated extract of *Centella asiatica*; ITT, intention to treat; TT, total treatment; T1, T2, T3, different treatments; P, placebo; C, control group; PC, placebo-controlled.

Table 4. *Echinacea purpurea*: reviews and meta-analyses of clinical trials concerning its efficacy in preventing and treating induced or naturally-occurring common cold; its immunomodulating, anticancer, antifungal effects, its role in the prevention and treatment of URI

References	Object of study	Total of participants	Number and Study type	Echinacea preparation	Outcome	Comments and limitations
24	Prevention and treatment of the common cold	1356 for the evaluation of cold incidence, 1630 for the evaluation of cold duration	14 randomized PC (7 evaluating cold incidence, 5 evaluating cold duration, 2 evaluating cold incidence and duration); 2 on children	7 EP, 1 EA, 1 EPP, 1 unspecified, 4 combinations of different species (5 with Echinacin or Echinagard from Madaus AG); 4 of <i>Echinacea</i> combined with supplements	<i>Echinacea</i> decreased the odds of developing the common cold by 58% and the duration of a cold by 1.4 days <i>Echinacea</i> decreases the incidence and duration of common cold	Large-scale randomized prospective studies are needed to take into account important variables such as plant species or variety, quality of preparation, dose, method of cold induction
25	Prevention and treatment of the common cold	1232 (T = 666 among whom 200 were children, P = 566, among whom 207 were children)	Seven double-blind PC randomized studies; one on children	5 EP, 2 EA + EP. No standardized preparations	Results are inconsistent; studies on larger numbers failed to show a significant effect, whereas smaller studies documented positive effects	Evidence on the efficacy of EP is scanty, especially in paediatric patients
26	Comparison of <i>Echinacea</i> with either a placebo, or no treatment, or another treatment for the prevention or treatment of common cold		16 randomized PC trials, all of them except 1 being double-blind	22 comparisons of an <i>Echinacea</i> preparation with a control group (19 with placebo, 2 with no treatment, 1 with another herbal preparation); 3 investigated the prevention of cold and 19 concerned treatment. A variety of different <i>Echinacea</i> preparations were used	None of the 3 comparisons in the prevention trials showed an effect over placebo. Comparing an <i>Echinacea</i> preparation with placebo as treatment, a significant effect was reported in 9 comparisons, a trend in 1, and no difference in 6	<i>Echinacea</i> preparations tested in clinical trials differ greatly. Beneficial effects of other <i>Echinacea</i> preparations for cold prevention may exist, but have not been substantiated by independently replicated, rigorous randomized trials

Table 4. (Continued)

References	Object of study	Total of participants	Number and Study type	Echinacea preparation	Outcome	Comments and limitations
27	Prevention of experimentally induced rhinovirus cold	390 (T = 223, P = 167)	Three double-blind PC randomized studies	2 EP (3 × 300 mg, 3 × 176 mg daily), 1 EA (3 × 300 mg daily); prophylactic treatment 7 or 14 days before virus challenge extended to 5 or 7 days after	The likelihood of experiencing a clinical cold was 55% higher with P than with <i>Echinacea</i> . Standardized <i>Echinacea</i> extracts were effective in prevention of symptoms of common cold after clinical inoculation	Additional clinical studies are needed to confirm this finding
28	Immunomodulating, anticancer and antifungal effects; prevention and treatment of URI	URI (1891), IE (165), AF (203), AC (43), BP (1450)	6 IE, 3 AC, 1 AF, 4 BP, 13 for prevention and treatment of URI, double-blind randomized, some PC	20 EP, 2 EA + EP, 3 EPP, 2 non-specified (9) Echinacin, 2 Echinagard, 1 Echinaforce, 3 Esberitox; 1 <i>Echinacea</i> combined with supplements	The immunomodulation activity is only partially understood. Human studies with oral preparation gave disomogeneous results. In the treatment of acute URI reduction (10–40%) of symptoms with early treatment was reported. Benefit as a cold preventive appeared marginal, with an estimated 5–15% effect as best trial to date	Although suggestive of a modest benefit, these trials were limited both in size and in methodological quality. Effectiveness in treating illness or enhancing health has not been proved beyond a reasonable doubt

T, treatments; P, placebo; PC, placebo controlled; EP, *Echinacea purpurea*; EA, *E. angustifolia*; EPP, *E. purpurea* pallida; URI, upper respiratory infection; IE, immunomodulating effects; AF, antifungal; AC, anticancer; BP, bronchitis and pertussis.

Table 5. *Echinacea purpurea*: Still unreviewed clinical trials concerning immunomodulating effects and URI prevention and treatment

References	Object of study	Number of participants	Study type	Preparation, dose, duration of treatment	Outcome	Comments and limitations
29	Effects on the frequency of UPT symptoms (preventive efficacy)	ITT = 90, TT = 58 (T = 28, P = 30)	Randomized double-blind, PC	T = 3 caps EP, P = parsley Duration of study = 8 weeks	T group reported 9 sick days per person during the 8-week period, whereas the P group 14 sick days. Prophylactic treatment with commercially available EP capsules did not significantly alter the frequency of UPT symptoms compared with placebo	
30	Alterations of erythroid growth factors and erythropoietic status	24 (T, P)	Double-blind PC	T = 8000 mg/day of either <i>Echinacea</i> or placebo in 5 × 400 mg × 4 times per day Duration of study = 28 days	Treatment resulted in an increase in EPO and IL-3 but did not significantly alter RBCs, Hb, or Hct	
31	CD25 expression on T cells after ingestion of <i>Echinacea purpurea</i> , <i>Astragalus membranaceus</i> and <i>Glycyrrhiza glabra</i>	14 (T1 = 4, T2 = 4, T3 = 3, T4 = 3)	Phase 0, double-blind, repeated within subject, randomized pilot study	T1 = EP, T2 = <i>A. membranaceus</i> , T3 = <i>G. glabra</i> , T4 = combination (7.5 mL of herbal extract twice daily)	CD25 expression on T cells was significantly increased in subjects ingesting <i>Echinacea</i> after 24 h with notable increases in activation from <i>Astragalus</i> and <i>Glycyrrhiza</i> Duration of study = 7 days	With daily use of <i>Echinacea</i> CD25 expression remains elevated for at least 7 days

Table 5. (Continued)

References	Object of study	Number of participants	Study type	Preparation, dose, duration of treatment	Outcome	Comments and limitations
32	Effects on electrocardiographic and blood pressure measurements on healthy volunteers	ITT = 17, TT = 16 (both phases)	Randomized PC crossover study	T = single 350 mg dose of EP or placebo in a crossover fashion with a 7-day washout period between treatment phases	A single 350 mg dose of EP had no effect on electrocardiographic and blood pressure measurements of healthy volunteers	
33	Efficacy in controlling low-grade uveitis	T1 = 32, T2 = 20	Pilot study	T1 = echinacea (150 mg twice a day) as add-on therapy, T2 = conventional steroid therapy alone Max duration of the trial = 9 months	19/21 patients with anterior uveitis and 9/11 with intermediate uveitis treated with <i>Echinacea</i> presented uveitis settled, with a steroid-off time of 209 and 146 days, respectively. BCVA was stable or improved in 19/21 of anterior uveitis and 9/11 of intermediate uveitis. T2 group required a longer treatment period with steroids with a steroid-off time of 121 and 87 days.	Systemic <i>Echinacea</i> proved effective and safe in the control of low-grade autoimmune idiopathic uveitis
34	Effect on CD69 expression and immune cell activation	16 (T1 = 4, T2 = 4, T3 = 3, T4 = 3, P = 2)	PC double-blind study	T1 = EP, T2 = <i>A. membranaceus</i> , T3 = <i>G. glabra</i> , T4 = combination (7.5 mL of tincture twice daily) Duration of study = 7 days	E. A. and G. herbal tinctures stimulate activation and proliferation of several types of immune cells. <i>Echinacea</i> increased total number of CD4, CD8 T and NK cells	The three herbal preparations when combined had an additive effect on immune cell activation, although not on proliferation

Table 5. (Continued)

References	Object of study	Number of participants	Study type	Preparation, dose, duration of treatment	Outcome	Comments and limitations
35	Effect on different subpopulations of B- and T-lymphocytes	40 (T = 20, P = 20)	Double-blind PC crossover study	T = Esberitox 12 mL daily Duration of study = 2 treatments, 14 days each, washout period: 4 weeks	No significant changes in the treatment period for T- and B-lymphocytes, CD4+- and CD8+-T-lymphocytes including the subgroups of 'naive' and 'memory' CD4+- and CD8+-T-lymphocytes as well as the natural killer cells	There is no evidence of an <i>Echinacea</i> increase in any of the lymphocyte subpopulation investigated
36	Effect on the immune response during a common cold	ITT = 150, TT = 56 (T = 25, P = 31)	Double-blind randomized PC study	T = Echinilin (8 doses of 5 mL on day 1 and 3 doses on other days) Duration of study = 7 days	In T group the monocyte and neutrophil counts were significantly higher at day 8. No significant effects on the distribution of CD3+, CD8+ and CD20+ cells, but a significant decrease in CD4+ cells on day 3 and increase in the NK cells on day 8. By day 8, in the P group an ongoing free-radical generation (oxidative burst capacity of the neutrophils) persisted	Echinilin, by enhancing the non-specific immune response and eliciting free-radical scavenging, may have caused a faster resolution of cold symptoms
37	Effect on the immune response	11	Pilot study	T = EP 675 mg + EA 600 mg twice daily Duration of study = 14 days	<i>Echinacea</i> enhances the immune response by altering the expression of leucocyte hsp70 and increasing white cell counts	

Table 5. (Continued)

References	Object of study	Number of participants	Study type	Preparation, dose, duration of treatment	Outcome	Comments and limitations
38	Stimulation of phagocytic activity and production of cytokines	40 (T, P)	Double-blind PC crossover study	T = freshly expressed EP juice Duration of study = 2 × 14 days with a washout period of 4 weeks in between	EP neither enhanced the phagocytic activity of polymorphonuclear leukocytes nor that of monocytes. EP did not influence the production of TNF-alpha and IL-1beta by LPS-stimulated monocytes	Other immunomodulatory effects may explain the effects of <i>Echinacea</i> preparations in reducing the duration and severity of URT infections as shown by randomized, double-blind clinical trials
39	Immunomodulating effects of EP and EA and larch arabinogalactan from Larix occidentalis	48 (T1, T2, T3, T4, T5, P)	Randomized, double-blind, PC, prospective trial	T1 = EPE, T2 = urEPA, T3 = EPA, T4 = EPALA, T5 = LA Duration of study = 4 weeks	Complement properdin increased by 21% in the EPA group and by 18% in the EPALA group, compared with the placebo group	The increase in complement properdin may be just one aspect of immune system stimulation in patients treated with either EPA and EPALA
40	Influence on genital herpes	50 (T, P)	Single centre, prospective, double-blind, PC crossover	T = Echinaforce Duration of study = 1-year period (6-month placebo and 6-month Echinaforce)	No statistically significant benefit could be detected in this study comparing placebo vs. Echinaforce in the treatment of frequently recurrent genital herpes	

UPT, upper respiratory tract; BCVA, best-corrected visual acuity; RBCs, blood cells; Hct, hematocrit; Hb, haemoglobin; EPO, erythropoietin; IL-3, interleukin 3; T1, T2, T3, T4, T5, different treatments; P, placebo; ITT, intention to treat; TT, total treatment; PC, placebo controlled; EP, *Echinacea purpurea*; EA, *Echinacea angustifolia*; EPE, standardized extract of *E. purpurea*; urEPA, ultra-refined *E. purpurea*/*E. angustifolia*; EPALA, *E. purpurea*/*E. angustifolia* plus larch arabinogalactan; LA, larch arabinogalactan.

Table 6. *Passiflora incarnata*

References	Object of study	Number of participants	Study type	Preparation, dose, duration of treatment	Outcome	Comments and limitations
41	Treatment of preoperative anxiety	60 (T = 30, P = 30)	Double-blind PC randomized trial	T = <i>Passiflora incarnata</i> (500 mg, Passipy Iran Darouk) as premedication 90 min before surgery	The numerical rating scale anxiety scores were significantly lower in the <i>Passiflora</i> group than in the control group. In outpatient surgery, a <i>Passiflora</i> premedication reduced anxiety without inducing sedation	No significant differences in psychological variables in the post-anaesthesia care unit; the recovery of psychomotor function was comparable in both groups
42	Adjuvant agent in management of anxiety during opiates detoxification by clonidine	65 (T1, T2 + P)	Double-blind randomized controlled trial	65 opiates addicts assigned randomly to treatments: T1 = <i>Passiflora</i> extract (60 drops) + clonidine tablet (0.8 mg), T2 + P = clonidine tablet + placebo drops Duration of study = 14 days	Both protocols were equally effective in treating the physical symptoms of withdrawal syndromes. T1 group showed a significant superiority over T2 in the management of mental symptoms	<i>Passiflora</i> extract may be an effective adjuvant agent in the management of opiate withdrawal
43	Anxiolytic effect	36 (T1 + P = 18, T2 + P = 18)	Pilot double-blind randomized trial	T1 + P = <i>Passiflora</i> extract (45 drops per day) + placebo tablet, T2 + P = oxazepam (30 mg/day) + placebo drops Duration of study = 4 weeks	<i>Passiflora</i> extract and oxazepam were effective in the treatment of generalized anxiety disorder. No significant difference was observed between the two protocols	A larger study to confirm these results is wanted <i>Passiflora</i> extract is effective for the management of generalized anxiety disorder; it causes a low incidence of impairment of job performance compared with oxazepam, a distinct advantage. A large-scale trial is justified

T1, T2, different treatments; P, placebo; PC, placebo controlled.

Table 7. *Punica granatum*

References	Object of study	Number of participants	Study type	Preparation, dose, duration of treatment	Outcome	Comments and limitations
45	Antioxidant activity of a POMx and its safety as a dietary supplement for overweight individuals	(I) 64 (T1, T2, P), Study (II) 22	(I) safety assessment, PC (II) antioxidant activity assessment	(I) 1/2 POMx caps daily T1 = 710 mg POMx (435 mg GAEs), T2 = 1420 mg POMx (870 mg GAEs) (II) POMx 2caps daily = 1000 mg (610 mg of GAEs)	These studies demonstrate the safety of a POMx dietary supplement and provide evidence of antioxidant activity <i>in vivo</i>	No adverse events related to the dietary supplement consumption or changes in haematology, serum chemistry, or urinalyses were observed
46	Erectile dysfunction	53	Randomized, PC, double-blind, crossover study	T = PJ Duration of study = two 4-week treatment periods separated by a 2-week washout	Of the 42 subjects who demonstrated improvement in GAQ scores after beverage consumption, 25 reported improvement after drinking PJ	Statistical significance was not achieved
47	Protective and ameliorative effects of EA-rich PE on skin pigmentation after UV irradiation	T1 = 13, T2 = 13, P = 13	Double-blind, PC randomized trial	T1 = 200 mg/day EA, T2 = 100 mg/day EA Duration of study = 4 weeks	EA-rich PE, taken orally, has a slight inhibitory effect on skin pigmentation after UV irradiation	
48	Anti-oxidative effects on serum proteins and macrophages of PJ consumption by diabetic patients	T = 10, C = 10	Study with a control group	T = PJ 50 mL per day Duration of study = 3 months	PJ consumption by diabetic patients resulted in anti-oxidative effects on serum and macrophages	These effects could help controlling of atherosclerosis development in these patients
49	Effects of PJ consumption on PSA progression in men with a rising PSA following primary therapy for prostate cancer	48	Open-label, single-arm clinical trial (phase II, Simon two-stage)	T = 237 mL PJ daily (wonderful variety, 570 mg polyphenol GAEs) Duration of study = 13 months	A statistically significant prolongation of PSA doubling time warrants further testing in a PC study	The first clinical trial of PJ in patients with prostate cancer

Table 7. (Continued)

References	Object of study	Number of participants	Study type	Preparation, dose, duration of treatment	Outcome	Comments and limitations
50	Effect on dental plaque microorganisms	60 (T1 = 20, T2 = 20, P = 20)	Randomized PC comparative study	P = distilled water, T1 = chlorhexidine (standard), T2 = pomegranate HAE as mouth-rinses	HAE from <i>Punica granatum</i> also showed an antibacterial activity against selected microorganisms	May be a possible alternative for the control of dental plaque bacteria
51	Effect of antioxidant polyphenol-rich PJ supplementation on patients with stable COPD	30 (T = 15, P = 15)	Randomized, placebo, double-blind	T = 400 mL PJ daily, P = synthetic orange-flavoured drink Duration of study = 5 weeks	No differences between T and P groups for any of the serochemical and haematological parameters, urinary 8-iso-PGF (2 alpha), respiratory function variables and clinical symptoms of COPD	
52	Effects of PJ on patients with ischemic CHD	45 (T, P)	Randomized, PC, double-blind	T = PJ 240 mL/day, P = beverage of similar caloric content, amount, flavour and colour Duration of study = 3 months	The extent of SDS decreased in the pomegranate group (-0.8 ± 2.7) but increased in the control group (1.2 ± 3.1). Daily consumption of PJ may improve stress-induced myocardial ischemia in patients with CHD	
53	Improvement of lipid profiles in diabetic patients with hyperlipidemia	22	Quasi-experimental study	T = 40 g/day of concentrated PJ Duration of study = 8 weeks	After consumption of PJ, significant reductions in TC, LDL-C, LDL-C/HDL-C, and TC/HDL-C. No significant changes in serum triacylglycerol and HDL-C concentrations	Consumption of conc. PJ may modify heart disease risk factors in hyperlipidemic patients

Table 7. (Continued)

References	Object of study	Number of participants	Study type	Preparation, dose, duration of treatment	Outcome	Comments and limitations
54	Antifungal agent against candidosis associated with denture stomatitis	60 (T1 = 30, T2 = 30)	Clinical trial, randomized controlled trial	T1 = miconazole (Daktarin® oral gel), T2 = pomegranate gel, three times daily Duration of study = 15 days	Satisfactory and regular response in 27 and 21 subjects of T1 and T2, respectively. Absence of yeasts observed in 25 subjects of T1 and 23 of T2 group	Pomegranate may be useful as a topical antifungal agent for candidosis associated with denture stomatitis

T1, T2, different treatments; C, control group; P, placebo; PC, placebo controlled; GAQ, Global Assessment Questionnaire; POMx, pomegranate ellagitannin-enriched polyphenol extract; GAEs, gallic acid equivalents; EA, ellagic acid; PI, pomegranate juice; PE, pomegranate extract; PSA, prostate-specific antigen; GA, gallic acid; HAE, hydroalcoholic extract; COPD, chronic obstructive pulmonary disease; CHD, coronary heart disease; LDL-C, low-density lipoprotein cholesterol; HDL-C, high-density lipoprotein cholesterol; SDS, stress-induced ischemia.

studies using different (non-comparable) doses, regimes, or methods of administration. Data on the effectiveness of the plant on anxiety were too scanty for any firm conclusion to be drawn. The authors concluded that RCTs with larger samples were necessary, comparing the effectiveness of passiflora with placebo and other medications.

The effectiveness of cranberry products in preventing UTIs in susceptible populations has been reviewed by different authors (66–68). The last one reported the results of 10 studies, 5 crossover and 5 parallel-group (all randomized or quasi randomized), where cranberry/cranberry-lingonberry juice were evaluated vs. placebo, other juice or water, and cranberry tablets vs. placebo. One thousand and forty-nine patients were included. Cranberry products significantly reduced the incidence of UTIs over an observation period of 12 months. They were more effective in women with recurrent UTIs. However, the optimum dosage and method of administration were not clear. The author concluded that further properly designed studies were needed.

In 2004, Canter and Ernst (79) systematically reviewed PC trials on anthocyanosides extracted from *Vaccinium myrtillus* on night vision. They identified 30 relevant trials, 12 of which were placebo-controlled. To quote their conclusions: 'negative outcome was associated with more rigorous methodology but also with lower dose level and extracts from geographically distinct sources that may differ in anthocyanoside composition. The hypothesis that *Vaccinium myrtillus* anthocyanosides improves normal night vision is not supported by evidence from rigorous clinical studies'.

In 2006, a systematic review was published of randomized PC trials on the efficacy of valerian for improving sleep (84). Sixteen studies including 1093 patients were reviewed. The authors concluded that most studies were methodologically weak and there was a considerable variety of doses and preparations, as well as lengths of treatment. Available evidence suggests that valerian may improve sleep quality without producing side effects. Future studies employing standard measurements of sleep quality should assess recommended doses and safety of standardized valerian preparations.

In a previous review (85), evidence for the efficacy of valerian against insomnia was also found to

Table 8. *Vaccinium macrocarpon*: clinical trials to evaluate the UTI-related therapeutic properties of cranberry

References	Object of study	Number of participants	Study type	Preparation, dose, duration of treatment	Outcome	Comments and limitations
55	Antioxidant status and biosafety after consumption of dried CJ by healthy women	65 (T1 = 20, T2 = 22, P = 23)	Pilot double-blind trial	T1 = 400 mg of dried CJ per day, T2 = 1200 mg of dried CJ ^a per day Duration of study = 8 weeks	A statistically significant decrease in the serum level of AOPP was observed in volunteers consuming 1200 mg/day of dried CJ	Cranberry fruits are effective in preventing oxidative stress
56	MH vs. CT in the prevention of UTI in patients with neuropathic bladder following SCI	305 (T1, T2)	Double-blind factorial-design randomized controlled trial	T1 = MH 1 g twice daily. T2 = CT 800 mg twice daily	Prevention of UTI does not benefit from the addition of MH or CT to the usual regimen of patients with neuropathic bladder following SCI	
57	Prevention of UTIs in women	12	Open-label pilot study	T = 1 cap twice daily, 200 mg of concentrated CE (30% phenolics) Duration of study = 12 weeks	A cranberry preparation with a high phenolic content may wholly prevent UTIs in women who are subject to recurrent infections	
58	Efficacy of CJ consumption with regard to the presence of <i>in vitro</i> bacterial anti-adherence activity in the urine of healthy volunteers	20 (T1, T2, P1, P2)	Double-blind, randomized, PC, crossover study	P1 = 250 mL placebo + 500 mL mineral water, P2 = 750 mL placebo, T1 = 250 mL CJ ^b + 500 mL min. water, T2 = 750 mL CJ Four regimens successively in a randomly order, with a washout period of 6 days	A dose-dependent significant decrease in bacterial adherence associated with CJ consumption was observed against different <i>Escherichia coli</i> uropathogenic strains in the urine compared with placebo	No significant differences in the pH or specific gravity between the urine samples collected after cranberry or placebo consumption

Table 8. (Continued)

References	Object of study	Number of participants	Study type	Preparation, dose, duration of treatment	Outcome	Comments and limitations
59	Effectiveness in reducing UTIs in hospitalized older people	376 (T = 187 + P = 189)	Randomized, PC, double-blind trial	T = 300 mL of CJ ^b daily Duration of study = 15 days (P), 16 days (T). Follow-up = 35 days	5.6% participants developed a symptomatic UTI: 14/189 in P and 7/187 in T group. These between-group differences were not significant, although fewer infections with <i>Escherichia coli</i> in T	The infection rate observed was lower than anticipated, making the study underpowered. Larger trials are now required to determine whether CJ is actually effective in reducing UTIs in older hospitalized patients
60	Effects of CE on bacteriuria and pyuria in patients with SCI	48 (T = 26, P = 22)	Randomized, double-blind, PC study	T = 2 g of concentrated CJ daily Duration of study = 6 months	CE taken in capsule form did not reduce bacteriuria and pyuria in persons with SCI. No differences or trends detected between participants and controls	CE cannot be recommended for treating these conditions
61	Effects of CE on bacteriuria and pyuria in patients with SCI	21 (T, P)	Prospective, double-blinded, PC, crossover study	T = 400 mg CT thrice daily Duration of study = two 4-week treatments, 1-week washout period	CT were not found to affect urinary pH or reduce either bacterial counts or UTIs in individuals with neurogenic bladders	Further long-term studies are needed to relate specific types of bladder management and UTIs
62	Compared prophylactic efficacy of concentrated CT, and CJ against lower UTI in adult women	150 (T1, T2, P)	Randomized, PC, comparative controlled trial	T1 = placebo juice + CT, T2 = CJ + placebo (CT twice daily, CJ 250 mL three times daily) Duration of study = 1 year	Both CJ and CT statistically significantly decreased the number of patients experiencing at least one symptomatic UTI per year (to 20% and 18%, respectively) compared with placebo (to 32%)	CT provided the greater cost-effective prevention of UTI

Table 8. (Continued)

References	Object of study	Number of participants	Study type	Preparation, dose, duration of treatment	Outcome	Comments and limitations
63	Effect of CJ on bacterial biofilm load in the bladder	15	Pilot study	T = a 250 mL water thrice daily for 7 days, then a 250 mL CJ ^b thrice daily Duration of study = 15 days	CJ intake significantly reduced the biofilm load compared with baseline, thus reducing the risk of UTI	Results encourage the carrying out of further, larger clinical trials of the use of CJ to reduce UTI risk
64	Effect of cran berry prophylaxis on bacteriuria and rates of symptomatic UTI in children with neurogenic bladder	15 (T, P)	Double-blind, PC, crossover study	T = cranberry concentrate or placebo Duration of study = 6 months (3 months receiving cranberry concentrate, followed by 3 months of placebo)	The frequency of bacteriuria in patients with neurogenic bladder is 70%. Cranberry concentrate had no effect on bacteriuria in this population. No significant difference in the acidification of urine in the P group vs. the cranberry group	
65	Effect of regular intake of a CJ beverage on bacteriuria and pyuria in elderly women	ITT = 192, TT = 153 (T, P)	Quasi-randomized, double-blind, PC trial	T = 300 mL commercially available CJ per day, P = synthetic drink indistinguishable in taste, appearance, and vitamin C	Cranberry beverage reduced the incidence of bacteriuria with pyuria in older women	Current beliefs about the effects of cranberry juice on the urinary tract may have microbiologic justification.

UTI, urinary tract infections; SCI, spinal cord injury; LJ, Lingonberry juice; AOPP, advanced oxidation protein products; MH, Methenamine Hippurate; CE, cranberry extract; CJ, cranberry juice; CT, cranberry tablets; P, placebo treatments; T, treatment; T1, T2, different treatments; C, control group; ITT, intention to treat.

^aNutriCran90, Decas Botanical Synergies, US.

^bOcean Spray Cranberries Inc., Lakeville-Middleboro, USA.

Table 9. *Vaccinium macrocarpon*: clinical trials to evaluate non-UTI-related therapeutic properties of cranberry

References	Object of study	Number of participants	Study type	Preparation, dose, duration of treatment	Outcome	Comments and limitations
69	Effect of regular intake of CJ and the probiotic La1 to inhibit <i>Helicobacter pylori</i> in asymptomatic colonized children	295 (T1, T2, T3, C)	Multicentre, randomized, PC, double-blind trial	T1 = CJ/La1, T2 = placebo juice/La1, T3 = CJ/heat-killed La1, C = placebo juice/heat-killed La1 (daily CJ 200 mL, La1 80 mL) Duration of study = 3 weeks	<i>Helicobacter pylori</i> eradication rates significantly differed in the four groups: 1.5% in C group compared with 14.9%, 16.9%, and 22.9% in the La1, CJ, and CJ/La1 groups, respectively	A regular intake of CJ or La1 may be useful in the management of asymptomatic children colonized by <i>H. pylori</i> . No synergistic inhibitory effects in CJ/La1 group
70	Effect of CJ on the eradication of <i>Helicobacter pylori</i> in treated patients	177 (T = 89, P = 88) + C = 712	Double-blind randomized clinical study	All treated with OAC (1 week) + T1 = 250 mL CJ ^a twice daily Duration of study = 2 weeks C = OAC alone for 1 week	For females, eradication rate was higher in the CJ-OAC (95.2%) than in the P-OAC arm (86.8%) and significantly higher than in the non-P-OAC group (80%). For males, the rate was non-significantly lower in the CJ-OAC arm (73.9%) than in the P-OAC arm (80%) and non-P-OAC group (85%)	Addition of cranberry to triple therapy improves the rate of <i>H. pylori</i> eradication in females
71	Effect of consuming increasing daily doses of CJ on the plasma lipid profile of abdominally obese men	31	Blind PC study	P = 4-week run-in period 500 mL/day PJ ^a , three 4-week successively periods = 125 mL (T1), 250 mL (T2) and 500 mL (T3) CJC daily Duration of study = 12 weeks	A significant increase in plasma HDL-cholesterol concentration after the consumption of 250 mL CJC per day, plateaued during T3. No variation was observed in total as well as in LDL and VLDL cholesterol	Polyphenolic compounds from cranberries may be responsible for this effect, supporting the notion that the consumption of flavonoid-rich foods can be cardioprotective

Table 9. (Continued)

References	Object of study	Number of participants	Study type	Preparation, dose, duration of treatment	Outcome	Comments and limitations
72	Effect of anthocyanin-rich CJ on plasma antioxidant activity and biomarkers of oxidative stress in 20 healthy female volunteers	20 (T + P)		T = 750 mL/day of CJ Duration of study = 2 weeks	Plasma vitamin C increased significantly in volunteers consuming CJ. Total phenols, tHcy, TC, TG, HDL and LDL were unchanged. The plasma antioxidant potential, GSH-Px, CAT and SOD activities, and MDA were similar for both groups. Supplementation with CJ did not affect 8-oxo-dG in urine or endogenous or H ₂ O ₂ -induced DNA damage in lymphocytes	CJ consumption did not alter blood or cellular antioxidant status or several biomarkers of lipid status relevant to heart disease. CJ had no effect on basal or induced oxidative DNA damage
73	Efficacy of CJ on neuropsychologic functions of cognitively intact older adults	50 (T = 25, P = 25)	Double-blinded, randomized parallel-group	T = 32 oz/day of a beverage containing 27% CJ per vol Duration of study = 6 weeks	No significant interactions were found between the cranberry and placebo groups and their pretreatment baseline and end-of-treatment phase-standardized neuropsychologic assessments	

Table 9. (Continued)

References	Object of study	Number of participants	Study type	Preparation, dose, duration of treatment	Outcome	Comments and limitations
74	Effectiveness in the suppression of <i>H. pylori</i>	189 (T = 97, P = 92)	Prospective, randomized, double-blind, PC trial	T = two 250 mL juice boxes of CJ ^a daily Duration of study = 90 days	Regular consumption of CJ can suppress <i>H. pylori</i> infection	
75	Effect of CJ on nasopharyngeal and colonic bacterial flora, as well as infectious diseases and related symptoms in children	341 (T = 171, P = 170)	PC randomized trial	T = CJ 5 mL/kg (up to 300 mL) of CJ ^a (41 g cranberry concentrate) or a placebo per day, divided into three doses Duration of study = 3 months	CJ was well accepted by the children, but caused no change in either the respiratory bacterial flora or the fatty acid composition of stool bacteria	Cranberry juice had no effect on common infectious diseases or their symptoms
76	Effect of CJ on urolithiasis risk factors	24 (12 normal, 12 calcium oxalate stone-formers)	Randomized study	T1 = 1 L of CJ ^a daily, T2 = 1 L of deionized water Duration of study = 7-day (T1) + 7-day (T2), washout period between phases of about 3 weeks	It reduces urinary pH likely by providing an acid load and decreasing urinary uric acid perhaps by retarding urate synthesis. Overall, CJ increases the risk of calcium oxalate and uric acid stone formation but decreases the risk of brushite stones	
77	Influence on side effects of diabetes and quality of life of diabetics	27 (T = 14, P = 13)	Randomized PC	T = six capsules CJ concentrate powder daily (240 mL CJ) Duration of study = 12 weeks	No differences were found between the treatment groups in fasting serum glucose, HbA _{1c} , fructosamine, TG, or HDL or LDL levels after 6 and 12 weeks	

Table 9. (Continued)

References	Object of study	Number of participants	Study type	Preparation, dose, duration of treatment	Outcome	Comments and limitations
78	Effect of CJ on urinary biochemical and physicochemical risk factors associated with Ca oxalate urolithiasis	20 (T = 10, P = 10) (African men with no previous history of kidney stones)	Randomized PC crossover trial	T = 500 mL of CJ ^b diluted with 1500 mL tap water, P = 2000 mL of tap water Duration of study = 2 weeks, 2-week washout period before the two groups crossed over	The ingestion of CJ significantly and uniquely altered 3 key urinary risk factors: it increased citrate excretion, decreased oxalate and phosphate excretion and relative Ca oxalate supersaturation	CJ has antilithogenic properties, deserving consideration for conservative therapy in Ca oxalate urolithiasis

P, placebo treatment; PJ, placebo juice; T, treatment; T1, T2, T3, different treatments; C, control group; PC, placebo controlled; La1, Lactobacillus johnsonii La1; CJ, cranberry juice; CJC, cranberry juice cocktail; OAC, triple therapy with omeprazole, amoxicillin and clarithromycin; ESR, electron spin resonance spectrometry; tHcy, homocysteine; GSH, reduced glutathione; TC, total cholesterol; HDL, high-density lipoprotein; LDL, low-density lipoprotein cholesterol; TG, triglycerides; GSH-Px, Glutathione peroxidase; CAT, catalase; SOD, superoxide dismutase; MDA, malondialdehyde, 8-oxo-dG = 8-oxo-deoxyguanosine; HbA_{1c}, emoglobina glicosilata.

^aOcean Spray Cranberries Inc., Lakeville-Middleboro, USA.

^bCrystal Falls, Black Sheep Beverage Distributors, South Africa.

Table 10. *Vaccinium myrtillus*

References	Object of study	Number of participants	Study type	Preparation, dose, duration of treatment	Outcome	Comments and limitations
80	Effects of berry consumption on platelet function, blood pressure, and HDL cholesterol	71 (T = 35, C = 36)	Single-blind, randomized, PC trial	T = 2 portions of various berries daily ^a C = 1 of 4 different control products each day ^b Duration of study = 8 weeks	Plasma concentrations of polyphenols and Vitamin C increased in T group significantly more than in C. TC and TG were unaffected by the intervention, while HDL increased significantly more in T group (5.2%) than in C group (0.6%). SBP decreased slightly in T group (1.5 mmHg). Berry consumption significantly inhibited platelet function	The consumption of moderate amounts of berries resulted in favourable changes in platelet function, HDL cholesterol, and blood pressure. A regular consumption of berries may play a role in the prevention of cardiovascular disease
81	Effect of anthocyanin supplementation in the prevention of chronic inflammatory diseases in healthy adults	118 (T = 59, P = 59)	m	T = 2 × 75 mg Medox caps twice daily, providing a total of 300 mg anthocyanins per day (Medpalett Pharm., purified anthocyanins from bilberries and blackcurrant), P = caps with maltodextrin and blue colour additive Duration of study = 3 weeks	Medox anthocyanins decreased the plasma concentration of several NF-κB-regulated pro-inflammatory chemokines and immunoregulatory cytokines	Anthocyanin supplementation may play a role in the treatment of chronic inflammatory diseases

Table 10. (Continued)

References	Object of study	Number of participants	Study type	Preparation, dose, duration of treatment	Outcome	Comments and limitations
82	Investigation of the effect of bilberry on night VA and night CS	15 (P = 8, T = 7)	Double-blind, PC, crossover design	T = 1 cap thrice daily (160 mg bilberry extract (25% anthocyanosides), P = inactive ingredients (Mg aspartate and colouring) Duration of study = 2 × 3 weeks, 1-month washout period	No difference in night VA during any of the measurement periods, no difference in night CS during any of the measurement periods	It is doubtful that bilberry supplementation, in the forms currently available and in the recommended doses, is effective in improving night vision
83	Treatment of primary fibromyalgia	12 (T1, T2, T3, P)	Double-blind, crossover trial, PC	T1 = anthocyanidins [§] 120 mg, T2 = 80, T3 = 40 mg, daily Duration of study = 3 months	Small but statistically significant benefits at a dose of 80 mg/day, the recommended one for these substances to be used as a food supplement	Further trials of anthocyanidins in a larger number of patients should probably be undertaken

T1, T2, T3, different treatments; P, placebo; VA, night visual acuity; CS, night contrast sensitivity; TC, total serum cholesterol; HDL, high-density lipoprotein; TG, serum triglycerides; SBP, systolic blood pressure.

^aEvery day, whole bilberries (100 g) and a nectar containing 50 g crushed lingonberries were consumed. Black currant or strawberry purée (100 g, 80% black currants) and cold-pressed chokeberry and raspberry juice (0.7 dL juice, 80% chokeberry) were consumed on the alternating days.

^bThe control products were 2 dL sugar-water, 100 g sweet semolina porridge, 100 g sweet rice porridge, and 40 g marmalade sweets. The aim was to control for the increased energy intake in the berry group. [§] Sources of anthocyanidins: grape seed (*Vitis vinifera*), bilberries (*Vaccinium myrtillus*) cranberries (*Vaccinium macrocarpon*). The product is manufactured under the name of Colladeen[®] by Lamberts Healthcare Ltd, UK.

Table 11. *Valeriana officinalis*

References	Object of study	Number of participants	Study type	Preparation, dose, duration of treatment	Outcome	Comments and limitations
87	Effectiveness of kava for reducing anxiety and of valerian for improving sleep quality	391 (T1 = 121, T2 = 135, P = 135)	Randomized, double-blind, PC trial	T1 = 1 kava softgel caps. (100 mg of total kavalactones) 3 daily, 2 placebo-valerian softgel caps. 1 h before bedtime. T2 = 2 valerian softgel caps (each 3.2 mg of valerenic acids). 1 h before bedtime, and 1 placebo-kava softgel caps. 3 daily Duration of study = 28 days	Neither kava nor valerian relieved anxiety or insomnia more than placebo	
88	Effects of valerian on the sleep, cognitive and psychomotor function of sleep-disturbed older adults	16 (T1, T2, P)	Double-blind PC three-way crossover clinical trial	T1 = a 21:00 hours dose of valerian 300 mg, T2 = valerian 600 mg	No significant effect between valerian 300 mg, valerian 600 mg or placebo on any EEG parameter or psychometric measure. Valerian at these doses is ineffective as an acute dose for sleep problems	More research is required into therapeutic dose, types of valerian preparation, and the optimum period of use for therapeutic effect
89	Effect of valerian on mood and/or psychomotor/cognitive performance	10 young healthy volunteers (T1, T2, T3, T4, P)	Randomized, PC, double-blind, crossover trial	T = 90 mL of water with 5 identical (colour and size) caps. containing VRE (Lichtwer Pharma, Eatontown, NJ, USA) (T1 = 600, T2 = 1200, T3 = 1800 mg), T4 = 10 mg diazepam, P = cornstarch	No significant effects	Acute administration of valerian does not have mood-altering or psychomotor/cognitive effects in young healthy volunteers

Table 11. (Continued)

References	Object of study	Number of participants	Study type	Preparation, dose, duration of treatment	Outcome	Comments and limitations
90	Effectiveness of valerian for the management of chronic insomnia in general practice	21 (T + P)	Randomized, PC trial	T = 225 mg valerian extract Duration of study = 21 days	Valerian was not shown to be appreciably better than placebo in promoting sleep or sleep-related factors for any individual patient or for all patients as a group	
91	Study of the cognitive and psychomotor effects of single oral doses of valerian	Nine healthy subjects (T1, T2, T3, P)	Double-blind, PC, four-way cross-over study	T1 = valerian 500 mg, T2 = valerian 1000 mg, T3 = triazolam 0.25 mg	Valerian was without effect on either cognitive or psychomotor performance in healthy volunteers at the doses used	
92	Efficacy and tolerability of valerian extract LI 156 compared with oxazepam in the treatment of non-organic insomnia	202 (T1, T2)	Multicentre, double-blind, randomized comparative study	T1 = 600 mg/day VE (LI 156 Sedonium), T2 = 10 mg/day oxazepam Duration of study = 6 weeks	Valerian extract LI 156 (Sedonium) 600 mg/day showed a comparable efficacy to 10 mg/day oxazepam in the therapy of non-organic insomnia	Adverse events occurred in 29 patients (28.4%) receiving valerian extract LI 156 and 36 patients (36.0%) under oxazepam, and were all rated mild to moderate
93	Studied of the sleep of patients with insomnia who complained of poor sleep despite chronic use of benzodiazepines	37 (T = 19 patients with primary insomnia, C = 18 healthy individuals)	Double-blind PC	T = concoction of valepotriates (80% didrovaltrate, 15% valtrate, and 5% acclvaltrate) three times daily in 100 mg doses ^a Duration of study = 15 days	Valerian had a positive effect on withdrawal from BDZ use	

Table 11. (Continued)

References	Object of study	Number of participants	Study type	Preparation, dose, duration of treatment	Outcome	Comments and limitations
94	Study on the putative anxiolytic effect of valepotriates	36 outpatients with generalized anxiety disorder (T1 = 12, T2 = 12, P = 12)	Randomized parallel, double-blind, flexible-dose, PC pilot Study	T1 = valepotriates (mean daily dose: 81.3 mg), T2 = diazepam (mean daily dose: 6.5 mg) Duration of study = 4 weeks	The preliminary data obtained in the present study suggest that the valepotriates may have a potential anxiolytic effect on the psychic symptoms of anxiety	As the number of subjects per group was very small, the present results must be viewed as preliminary. Further studies addressing this issue are warranted
95	Effect on sleep difficulties in children with intellectual deficits	Five children with varying intellectual deficits and different primary sleep problems (T, P)	Double-blind, PC and randomized trial	T = 20 mg/kg Duration of study = 14 days	Significant reductions in sleep latencies and nocturnal time awake, lengthened total sleep time and improved sleep quality. The treatment was apparently most effective in children with deficits that involved hyperactivity	Although the findings are preliminary and in need of replication, there is evidence to suggest that valerian may be useful in the safe and effective long-term treatment of intransigent sleep difficulties in children with ID's
96	Improvement of sleep quality when treating non-organic insomniacs with extractum Valerianae radix siccum instead of oxazepam	75 (T, C)	Randomized, double-blind, clinical, comparative study	T = 2 × 300 mg extractum Valerianae radix siccum dragées LI 156, C = 2 × 5 mg oxazepam dragées, daily 30 min before going to bed Duration of study = 28 days	In both groups sleep quality improved significantly, but no statistically significant difference could be found between groups. No differences in the efficacy of valerian and oxazepam	Because of the more favourable adverse effect profile of valerian compared with oxazepam, this hypothesis should be analysed confirmatorily in an equivalence study
97	Effect of valerian extract on sleep structure and sleep quality	16 patients with previously established psycho physiological insomnia (T, P)	Randomized, double-blind, PC, crossover study	T = multiple dosage Duration of study = single dose or 14 days	Treatment with a herbal VRE demonstrated positive effects on sleep structure and sleep perception of insomnia patients	It can therefore be recommended for the treatment of patients with mild psychophysiological insomnia

Table 11. (Continued)

References	Object of study	Number of participants	Study type	Preparation, dose, duration of treatment	Outcome	Comments and limitations
98	Influence of valerian on reaction time, alertness and concentration	102 (99 volunteers in Section A, 91 in Section B)	Randomized, controlled, double-blind trial	Section A: T1 = single evening dose of VRE (600 mg LI 156), T2 = FNZ (1 mg). Section B: after 2 weeks of evening administration of VRE (600 mg LI 156)	Neither single nor repeated evening administrations of 600 mg of VRE have a relevant negative impact on reaction time, alertness and concentration the morning after intake Subjects in the valerian group showed an increase in SWS and a decrease in sleep stage 1	No effect on sleep onset time or time awake after sleep onset, on self-rated sleep quality. REM sleep was unaltered
99	Effect of valerian extract on sleep polygraphy in poor sleepers	14 (T = 8, P = 6)	PC study	T = valerian extract (Valdispert forte, 405 mg t.i.d.) Duration of study = 7 days	The aqueous valerian extract exerts a mild hypnotic action Both doses reduced perceived sleep latency and wake time after sleep onset	The data suggest the dose-dependent effect
100	Effect of aqueous extract of valerian root on sleep	18 (T1, T2, P)	PC study	T1 = valerian extract 450 mg. T2 = valerian extract 900 mg		
101	Pharmacological activity of valepotriates and sesquiterpenes of valerian		Double-blind study	T = Valeriana Natt. preparation containing primarily sesquiterpenes	44% reported perfect sleep and 89% reported improved sleep from the preparation	No side effects were observed

Table 11. (Continued)

References	Object of study	Number of participants	Study type	Preparation, dose, duration of treatment	Outcome	Comments and limitations
102	The effect of an aqueous extract of valerian root on subjectively rated sleep measures	128	Randomized controlled trial	T = 9 samples to test (3 samples containing placebo, 3 samples containing 400 mg valerian extract and 3 samples containing a proprietary over-the-counter valerian preparation)	Valerian produced a significant decrease in subjectively evaluated sleep latency scores and a significant improvement in sleep quality	Night awakenings, dream recall and somnolence the next morning were relatively unaffected by valerian. The only change was a significant increase in reports of feeling more sleepy than normal the next morning

T1, T2, T3, different treatments; P, placebo; C, control group; PC, placebo controlled; VRE, valerian root extract; FNZ, flunitrazepam; SWS, slow-wave sleep; BDZ, benzodiazepines.
^aObtained from a commercially available product, Valmane (Whitehall Pharm.).

be inconclusive. In fact, findings were contradictory and there was great inconsistency in trial design (number of patients, experimental procedures and methodological quality). In 2006, Miyasaka *et al.* (86) presented a review on randomized and quasi-randomized controlled trials of *Valeriana officinalis* in the treatment of anxiety disorder. Valerian extract in any dose, regime, or method of administration was tried for general anxiety disorder, anxiety neurosis, chronic anxiety status, or any other disorder in which anxiety was the primary symptom. The authors concluded that there was insufficient evidence about the efficacy or safety of valerian compared with placebo or diazepam. RCTs involving larger samples are needed, comparing valerian with placebo or other means used to treat of anxiety disorders, such as antidepressants.

CONCLUSION

Establishing the efficacy of most phytopreparations and identifying their mechanism(s) of action are major challenges. The present review provides a baseline on the level of evidence available on many of those preparations and should be of help to those intending to research further on these topics.

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REFERENCES

- Ulrich-Merzenich G, Zeitlera H, Jobstb D, Paneka D, Vettera H, Wagner H (2007) Application of the “-Omic-” technologies in phytomedicine. *Phyto-medicine*, **14**, 70–82.
- Benedum J (1998) Phytotherapie in der Antike. In: Loew D, Rietbrock N, eds. *Phytopharmaka IV. Forschung und klinische Anwendung*. Darmstadt: Steinkopff, 3–11.
- Patwardhan B, Warude D, Pushpangadan P, Bhatt N (2005) Ayurveda and traditional Chinese medicine: a comparative overview. *Evidence-Based Complementary and Alternative Medicine*, **2**, 465–473.
- WHO Traditional Medicine Strategy (2002–2005). Available at: <http://whqlibdoc.who.int/hq/2002/>

- WHO_EDM_TRM_2002.1.pdf (accessed November 2007).
5. Pieters L, Vlietinck AJ (2005) Bioguided isolation of pharmacologically active plant components, still a valuable strategy for the finding of new lead compounds. *Journal of Ethnopharmacology*, **100**, 57–60.
 6. Rouhi H, Ganji F (2007) Effect of *Althaea officinalis* on cough associated with ACE inhibitors. *Pakistan Journal of Nutrition*, **6**, 256–258.
 7. Zerehsaz F, Salmanpour R, Handjani F, Ardehali S, Panjehshahin MR, Tabei SZ, Tabatabaee HR (1999) A double-blind randomized clinical trial of a topical herbal extract (Z-HE) vs. systemic meglumine antimoniate for the treatment of cutaneous leishmaniasis in Iran. *International Journal of Dermatology*, **38**, 610–612.
 8. Duran V, Matic M, Jovanovic M, Mimica N, Gajinov Z, Poljacki M, Boza P (2005) Results of the clinical examination of an ointment with marigold (*Calendula officinalis*) extract in the treatment of venous leg ulcers. *International Journal of Tissue Reactions-Experimental and Clinical Aspects*, **27**, 101–106.
 9. Pommier P, Gomez F, Sunyach MP, D'Hombres A, Carrie C, Montbarbon X (2004) Phase III randomized trial of *Calendula officinalis* compared with trolamine for the prevention of acute dermatitis during irradiation for breast cancer. *Journal of Clinical Oncology*, **22**, 1447–1453.
 10. Wattanathorn J, Mator L, Muchimapura S et al. (2008) Positive modulation of cognition and mood in the healthy elderly volunteer following the administration of *Centella asiatica*. *Journal of Ethnopharmacology*, **116**, 325–332.
 11. De SanctisMT, Belcaro G, Incandela L, Cesarone MR, Griffin M, Ippolito E, Cacchio M (2001) Treatment of edema and increased capillary filtration in venous hypertension with total triterpenic fraction of *Centella asiatica*: a clinical, prospective, placebo-controlled, randomized, dose-ranging trial. *Angiology*, **52**, 55–59.
 12. Cesarone MR, Incandela L, De SanctisMT, Belcaro G, Bavera P, Bucci M, Ippolito E (2001) Evaluation of treatment of diabetic microangiopathy with total triterpenic fraction of *Centella asiatica*: a clinical prospective randomized trial with a microcirculatory model. *Angiology*, **52**(Suppl. 2), S49–S54.
 13. Cesarone MR, Incandela L, De SanctisMT et al. (2001) Flight microangiopathy in medium- to long-distance flights: prevention of edema and microcirculation alterations with total triterpenic fraction of *Centella asiatica*. *Angiology*, **52**, 33–37.
 14. Cesarone MR, Belcaro G, De SanctisMT et al. (2001) Effects of the total triterpenic fraction of *Centella asiatica* in venous hypertensive microangiopathy: a prospective, placebo-controlled, randomized trial. *Angiology*, **52**, 15–18.
 15. Cesarone MR, Belcaro G, Nicolaides AN et al. (2001) Increase in echogenicity of echolucent carotid plaques after treatment with total triterpenic fraction of *Centella asiatica*: A prospective, placebo-controlled, randomized trial. *Angiology*, **52**, 19–25.
 16. Cesarone MR, Belcaro G, Rulo A et al. (2001) Microcirculatory effects of total triterpenic fraction of *Centella asiatica* in chronic venous hypertension: measurement by laser Doppler, TcPO₂-CO₂, and leg volumetry. *Angiology*, **52**, 45–48.
 17. Incandela L, Belcaro G, Cesarone MR, De SanctisMT, Nargi E, Patricelli P, Bucci M (2001) Treatment of diabetic microangiopathy and edema with total triterpenic fraction of *Centella asiatica*: a prospective, placebo-controlled randomized study. *Angiology*, **52**, 27–31.
 18. Incandela L, Belcaro G, De SanctisMT et al. (2001) Total triterpenic fraction of *Centella asiatica* in the treatment of venous hypertension: a clinical, prospective, randomized trial using a combined microcirculatory model. *Angiology*, **52**, 61–67.
 19. Incandela L, Belcaro G, Nicolaides AN et al. (2001) Modification of the echogenicity of femoral plaques after treatment with total triterpenic fraction of *Centella asiatica*: A prospective, randomized, placebo-controlled trial. *Angiology*, **52**, 69–73.
 20. Bradwejn J, Zhou Y, Koszycki D, Shlik J (2000) A double-blind, placebo-controlled study on the effects of Gotu Kola (*Centella asiatica*) on acoustic startle response in healthy subjects. *Journal of Clinical Psychopharmacology*, **20**, 680–684.
 21. Cesarone MR, Laurora G, De SanctisMT, Incandela L, Grimaldi R, Marelli C, Belcaro G (1994) The microcirculatory activity of *Centella asiatica* in venous insufficiency. A double-blind study. *Minerva Cardioangiologica*, **42**, 299–304.
 22. Belcaro GV, Rulo A, Grimaldi R (1990) Capillary filtration and ankle edema in patients with venous hypertension treated with TTFCA. *Angiology*, **41**, 12–18.
 23. Pointel JP, Boccalon H, Cloarec M, Ledevhat C, Joubert M (1987) Titrated extract of *Centella asiatica* (TECA) in the treatment of venous insufficiency of the lower limbs. *Angiology*, **38**, 46–50.
 24. Shah SA, Sander S, White CM, Rinaldi M, Coleman CI (2007) Evaluation of *Echinacea* for the prevention and treatment of the common cold: a meta-analysis. *Lancet Infectious Diseases*, **7**, 473–480.
 25. Koenig K, Roehr CC (2006) Does treatment with *Echinacea purpurea* effectively shorten the course of upper respiratory tract infections in children? *Archives of Disease in Childhood*, **91**, 535–537.

26. Linde K, Barrett B, Wölkart K, Bauer R, Melchart D (2006) *Echinacea* for preventing and treating the common cold. *Cochrane Database of Systematic Reviews*, **1**, CD000530. Update of: *Cochrane Database of Systematic Reviews* (2000), **2**, CD000530.
27. Schoop R, Klein P, Suter A, Johnston SL (2006) *Echinacea* in the prevention of induced rhinovirus colds: a meta-analysis. *Clinical Therapeutics*, **28**, 174–183.
28. Barrett B (2003) Medicinal properties of *Echinacea*: a critical review. *Phytomedicine*, **10**, 66–86.
29. O'Neil J, Hughe S, Lourie A, Zweifler J (2008) Effects of *Echinacea* on the frequency of upper respiratory tract symptoms: a randomized, double-blind, placebo-controlled trial. *Annals of Allergy, Asthma & Immunology*, **100**, 384–388.
30. Whitehead MT, Martin TD, Scheett TP, Webster MJ (2007) The effect of 4 wk of oral *Echinacea* supplementation on serum erythropoietin and indices of erythropoietic status. *International Journal of Sport Nutrition and Exercise Metabolism*, **17**, 378–390.
31. Zwickey H, Brush J, Iacullo CM, Connelly E, Gregory WL, Soumyanath A, Buresh R (2007) The effect of *Echinacea purpurea*, *Astragalus membranaceus* and *Glycyrrhiza glabra* on CD25 expression in humans: a pilot study. *Phytotherapy Research*, **21**, 1109–1112.
32. Shah SA, Schlesselman L, Cios D, Lipeika J, Patel AA, Kluger J, White CM (2007) Effects of *Echinacea* on electrocardiographic and blood pressure measurements. *American Journal of Health-System Pharmacy*, **64**, 1615–1618.
33. Neri PG, Stagni E, Filippello M, Camillieri G, Giovannini A, Leggio GM, Drago F (2006) Oral *Echinacea purpurea* extract in low-grade, steroid-dependent, autoimmune idiopathic uveitis: a pilot study. *Journal of Ocular Pharmacology and Therapeutics*, **22**, 431–436.
34. Brush J, Mendenhall E, Guggenheim A *et al.* (2006) The effect of *Echinacea purpurea*, *Astragalus membranaceus* and *Glycyrrhiza glabra* on CD69 expression and immune cell activation in humans. *Phytotherapy Research*, **20**, 687–695.
35. Schwarz E, Parlesak A, Henneicke-von Zepelin HH, Bode JC, Bode C (2005) Effect of oral administration of freshly pressed juice of *Echinacea purpurea* on the number of various subpopulations of B- and T-lymphocytes in healthy volunteers: results of a double-blind, placebo-controlled cross-over study. *Phytomedicine*, **12**, 625–631.
36. Goel V, Lovlin R, Chang C *et al.* (2005) A proprietary extract from the *Echinacea* plant (*Echinacea purpurea*) enhances systemic immune response during a common cold. *Phytotherapy Research*, **19**, 689–694.
37. Agnew LL, Guffogg SP, Matthias A, Lehmann RP, Bone KM, Watson K (2005) *Echinacea* intake induces an immune response through altered expression of leucocyte hsp70, increased white cell counts and improved erythrocyte antioxidant defences. *Journal of Clinical Pharmacy and Therapeutics*, **30**, 363–369.
38. Schwarz E, Metzler J, Diedrich J, Freudenstein J, Bode C, Bode JC (2002) Oral administration of freshly expressed juice of *Echinacea purpurea* herbs fail to stimulate the nonspecific immune response in healthy young men: results of a double-blind, placebo-controlled crossover study. *Journal of Immunotherapy*, **25**, 413–420.
39. Kim LS, Waters RF, Burkholder PM (2002) Immunological activity of larch arabinogalactan and *Echinacea*: a preliminary, randomized, double-blind, placebo-controlled trial. *Alternative Medicine Review*, **7**, 138–149.
40. Vonau B, Chard S, Mandalia S, Wilkinson D, Barton SE (2001) Does the extract of the plant *Echinacea purpurea* influence the clinical course of recurrent genital herpes? *International Journal of STD & AIDS*, **12**, 154–158.
41. Movafegh A, Alizadeh R, Hajimohamadi F, Esfeh-ani F, Nejatfar M (2008) Preoperative oral *Passiflora incarnata* reduces anxiety in ambulatory surgery patients: a double-blind, placebo-controlled study. *Anesthesia and Analgesia*, **106**, 1728–1732.
42. Akhondzadeh S, Kashani L, Mobaserià M, Hosseini SH, Nikzad S, Khani M (2001) Passion flower in the treatment of opiates withdrawal: a double-blind randomized controlled trial. *Journal of Clinical Pharmacy and Therapeutics*, **26**, 369–373.
43. Akhondzadeh S, Naghavi HR, Vazirian M, Shayanpour A, Rashidi H, Khani M (2001) Passion-flower in the treatment of generalized anxiety: a pilot double-blind randomized controlled trial with oxazepam. *Journal of Clinical Pharmacy and Therapeutics*, **26**, 363–367.
44. Miyasaka LS, Atallah AN, Soares BG (2007) *Passiflora* for anxiety disorder. *Cochrane Database of Systematic Reviews*, **1**, CD004518.
45. Heber D, Seeram NP, Wyatt H *et al.* (2007) Safety and antioxidant activity of a pomegranate ellagitannin-enriched polyphenol dietary supplement in overweight individuals with increased waist size. *Journal of Agricultural and Food Chemistry*, **55**, 10050–10054.
46. Forest CP, Padma-Nathan H, Liker HR (2007) Efficacy and safety of pomegranate juice on improvement of erectile dysfunction in male patients with mild to moderate erectile dysfunction: a randomized, placebo-controlled, double-blind, crossover study. *International Journal of Impotence Research*, **19**, 564–567.

47. Kasai K, Yoshimura M, Koga T, Arie M, Kawasaki S (2006) Effects of oral administration of ellagic acid-rich pomegranate extract on ultraviolet-induced pigmentation in the human skin. *Journal of Nutritional Science and Vitaminology*, **52**, 383–388.
48. Rosenblat M, Hayek T, Aviram M (2006) Anti-oxidative effects of pomegranate juice (PJ) consumption by diabetic patients on serum and on macrophages. *Atherosclerosis*, **187**, 363–371.
49. Pantuck AJ, Leppert JT, Zomorodian N *et al.* (2006) Phase II study of pomegranate juice for men with rising prostate-specific antigen following surgery or radiation for prostate cancer. *Clinical Cancer Research*, **12**, 4018–4026.
50. Menezes SMS, Cordeiro LN, Viana GS (2006) *Punica granatum* (pomegranate) extract is active against dental plaque. *Journal of Herbal Pharmacotherapy*, **6**, 79–92.
51. Cerdá B, Soto C, Albaladejo MD, Martinez P, Sanchez-Gascon F, Tomas-Barberan F, Espin JC (2006) Pomegranate juice supplementation in chronic obstructive pulmonary disease: a 5-week randomized, double-blind, placebo-controlled trial. *European Journal of Clinical Nutrition*, **60**, 245–253.
52. Sumner MD, Elliott-Eller M, Weidner G *et al.* (2005) Effects of pomegranate juice consumption on myocardial perfusion in patients with coronary heart disease. *American Journal of Cardiology*, **96**, 810–814.
53. Esmailzadeh A, Tahbaz F, Gaieni I, Alavi-Majd H, Azadbakht L (2004) Concentrated pomegranate juice improves lipid profiles in diabetic patients with hyperlipidemia. *Journal of Medicinal Food*, **7**, 305–308.
54. Vasconcelos LCD, Sampaio MCC, Sampaio FC, Higino JS (2003) Use of *Punica granatum* as an antifungal agent against candidosis associated with denture stomatitis. *Mycoses*, **46**, 192–196.
55. Valentová K, Stejskal D, Bednař P *et al.* (2007) Biosafety, antioxidant status, and metabolites in urine after consumption of dried cranberry juice in healthy women: a pilot double-blind placebo-controlled trial. *Journal of Agricultural and Food Chemistry*, **55**, 3217–3224.
56. Lee BB, Haran MJ, Hunt LM *et al.* (2007) Spinal-injured neuropathic bladder antisepsis (SINBA) trial. *Spinal Cord*, **45**, 542–550.
57. Bailey DT, Dalton C, Daugherty FJ, Tempesta MS (2007) Can a concentrated cranberry extract prevent recurrent urinary tract infections in women? A pilot study *Phytomedicine*, **14**, 237–241.
58. Di Martino P, Agnietti R, David K, Templer C, Gailard JL, Denys P, Botto H (2006) Reduction of *Escherichia coli* adherence to uroepithelial bladder cells after consumption of cranberry juice: a double-blind randomized placebo-controlled cross-over trial. *World Journal of Urology*, **24**, 21–27.
59. McMurdo ME, Bissett LY, Price RJ, Phillips G, Crombie IK (2005) Does ingestion of cranberry juice reduce symptomatic urinary tract infections in older people in hospital? A double-blind, placebo-controlled trial *Age and Ageing*, **34**, 256–261.
60. Waites KB, Canupp KC, Armstrong S, DeVivo MJ (2004) Effect of cranberry extract on bacteriuria and pyuria in persons with neurogenic bladder secondary to spinal cord injury. *The Journal of Spinal Cord Medicine*, **27**, 35–40.
61. Linsenmeyer TA, Harrison B, Oakley A, Kirshblum S, Stock JA, Millis SR (2004) Evaluation of cranberry supplement for reduction of urinary tract infections in individuals with neurogenic bladders secondary to spinal cord injury. A prospective, double-blinded, placebo-controlled, crossover study. *The Journal of Spinal Cord Medicine*, **27**, 29–34.
62. Stothers L (2002) A randomized trial to evaluate effectiveness and cost effectiveness of naturopathic cranberry products as prophylaxis against urinary tract infection in women. *Canadian Journal of Urology*, **9**, 1558–1562.
63. Reid G, Hsieh J, Potter P, Mighton J, Lam D, Warren D, Stephenson J (2001) Cranberry juice consumption may reduce biofilms on uroepithelial cells: pilot study in spinal cord injured patients. *Spinal Cord*, **39**, 26–30.
64. Schlager TA, Anderson S, Trudell J, Hendley JO (1999) Effect of cranberry juice on bacteriuria in children with neurogenic bladder receiving intermittent catheterization. *Journal of Pediatrics*, **135**, 698–702.
65. Avorn J, Monane M, Gurwitz JH, Glynn RJ, Chodnovskiy I, Lipsitz LA (1994) Reduction of bacteriuria and piuria after ingestion of cranberry juice. *Journal of the American Medical Association*, **271**, 751–754.
66. Jepson RG, Craig JC (2007) A systematic review of the evidence for cranberries and blueberries in UTI prevention. *Molecular Nutrition & Food Research*, **51**, 738–745.
67. Jepson RG, Craig JC (2008) Cranberries for preventing urinary tract infections. *Cochrane Database of Systematic Reviews*, **1**, CD001321.
68. Raz R, Chazan B, Dan M (2004) Cranberry juice and urinary tract infections. *Clinical Infectious Diseases*, **38**, 1413–1419.
69. Gotteland M, Andrews M, Toledo M *et al.* (2008) Modulation of *Helicobacter pylori* colonization with cranberry juice and *Lactobacillus johnsonii* La1 in children. *Nutrition*, **24**, 421–426.
70. Shmueli H, Yahav J, Samra Z, Chodick G, Koren R, Niv Y, Ofek I (2007) Effect of cranberry juice on

- eradication of *Helicobacter pylori* in patients treated with antibiotics and a proton pump inhibitor. *Molecular Nutrition & Food Research*, **51**, 746–751.
71. Ruel G, Pomerleau S, Couture P, Lemieux S, Lamarche B, Couillard C (2006) Favourable impact of low-calorie cranberry juice consumption on plasma HDL-cholesterol concentrations in men. *British Journal of Nutrition*, **96**, 357–364.
 72. Duthie SJ, Jenkinson AM, Crozier A *et al.* (2006) The effects of cranberry juice consumption on antioxidant status and biomarkers relating to heart disease and cancer in healthy human volunteers. *European Journal of Clinical Nutrition*, **45**, 113–122.
 73. Crews WD Jr, Harrison DW, Griffin ML, Addison K, Yount AM, Giovenco MA, Hazell J (2005) A double-blinded, placebo-controlled, randomized trial of the neuropsychologic efficacy of cranberry juice in a sample of cognitively intact older adults: pilot study findings. *Journal of Alternative and Complementary Medicine*, **11**, 305–309.
 74. Zhang L, Ma J, Pan K, Go VL, Chen J, You WC (2005) Efficacy of cranberry juice on *Helicobacter pylori* infection: a double-blind, randomized placebo-controlled trial. *Helicobacter*, **10**, 139–145.
 75. Kontiokari T, Salo J, Eerola E, Uhari M (2005) Cranberry juice and bacterial colonization in children-A placebo-controlled randomized trial. *Clinical Nutrition*, **24**, 1065–1072.
 76. Gettman MT, Ogan K, Brinkley LJ, Adams-Huet B, Pak CY, Pearle MS (2005) Effect of cranberry juice consumption on urinary stone risk factors. *Journal of Urology*, **174**, 590–594.
 77. Chambers BK, Camire ME (2003) Can cranberry supplementation benefit adults with type 2 diabetes? *Diabetes Care*, **26**, 2695–2696.
 78. McHarg T, Rodgers A, Charlton K (2003) Influence of cranberry juice on the urinary risk factors for calcium oxalate kidney stone formation. *BJU International*, **92**, 765–768.
 79. Canter PH, Ernst E (2004) Anthocyanosides of *Vaccinium myrtillus* (Bilberry) for night vision – a systematic review of placebo-controlled trials. *Survey of Ophthalmology*, **49**, 38–50.
 80. Erlund I, Koli R, Alfthan G *et al.* (2008) Favorable effects of berry consumption on platelet function, blood pressure, and HDL cholesterol. *American Journal of Clinical Nutrition*, **87**, 323–331.
 81. Karlsen A, Retterstøl L, Laake P, Paur I, Kjølørud-Bøhn S, Sandvik L, Blomhoff R (2007) Anthocyanins inhibit nuclear factor- κ B activation in monocytes and reduce plasma concentrations of pro-inflammatory mediators in healthy adults. *Journal of Nutrition*, **137**, 1951–1954.
 82. Muth ER, Laurent JM, Jasper P (2000) The effect of bilberry nutritional supplementation on night visual acuity and contrast sensitivity. *Alternative Medicine Review*, **5**, 164–173.
 83. Edwards AM, Blackburn L, Christie S, Townsend S, David J (2000) Food supplements in the treatment of primary fibromyalgia: a double-blind, crossover trial of anthocyanidins and placebo. *Journal of Nutritional & Environmental Medicine*, **10**, 189–199.
 84. Bent S, Padula A, Moore D, Patterson M, Mehling W (2006) Valerian for sleep: a systematic review and meta-analysis. *American Journal of Medicine*, **119**, 1005–1012.
 85. Stevinson C, Ernst E (2000) Valerian for insomnia: a systematic review of randomized clinical trials. *Sleep Medicine*, **1**, 91–99.
 86. Miyasaka LS, Atallah AN, Soares BGO (2006) Valerian for anxiety disorders. *Cochrane Database of Systematic Reviews*, **4**, CD004515.
 87. Jacobs BP, Bent S, Tice JA, Blackwell T, Cummings SR (2005) An internet-based randomized, placebo-controlled trial of kava and valerian for anxiety and insomnia. *Medicine*, **84**, 197–207.
 88. Diaper A, Hindmarch I (2004) A double-blind, placebo-controlled investigation of the effects of two doses of a valerian preparation on the sleep, cognitive and psychomotor function of sleep-disturbed older adults. *Phytotherapy Research*, **18**, 831–836.
 89. Gutierrez S, Ang-Lee MK, Walker DJ, Zacny JP (2004) Assessing subjective and psychomotor effects of the herbal medication valerian in healthy volunteers. *Pharmacology, Biochemistry, and Behavior*, **78**, 57–64.
 90. Coxeter PD, Schluter PJ, Eastwood HL, Nikles CJ, Glasziou PP (2003) Valerian does not appear to reduce symptoms for patients with chronic insomnia in general practice using a series of randomised n-of-1 trials. *Complementary Therapies in Medicine*, **11**, 215–222.
 91. Hallam KT, Olver JS, McGrath C, Norman TR (2003) Comparative cognitive and psychomotor effects of single doses of *Valeriana officinalis* and triazolam in healthy volunteers. *Human Psychopharmacology: Clinical and Experimental*, **18**, 619–625.
 92. Ziegler G, Ploch M, Miettinen-Baumann A, Collet W (2002) Efficacy and tolerability of valerian extract LI 156 compared with oxazepam in the treatment of non-organic insomnia – a randomized, double-blind, comparative clinical study. *European Journal of Medical Research*, **7**, 480–486.
 93. Poyares DR, Guilleminault C, Ohayon MM, Tufik S (2002) Can valerian improve the sleep of insomniacs after benzodiazepine withdrawal? *Progress in Neuro-Psychopharmacology & Biological Psychiatry*, **26**, 539–545.

94. Andreatini R, Sartori VA, Seabra MLV, Leite JR (2002) Effect of valepotriates (Valerian extract) in generalized anxiety disorder: a randomized placebo-controlled pilot study. *Phytotherapy Research*, **16**, 650–654.
95. Francis AJ, Dempster RJ (2002) Effect of valerian, *Valeriana edulis*, on sleep difficulties in children with intellectual deficits: randomised trial. *Phytomedicine*, **9**, 273–279.
96. Dorn M (2000) Efficacy and tolerability of Baldrian vs. oxazepam in non-organic and non-psychiatric insomniacs: a randomised, double-blind, clinical, comparative study. *Forsch Komplementarmed Klass Naturheilkd*, **7**, 79–84.
97. Donath F, Quispe S, Diefenbach K, Maurer A, Fietze I, Roots I (2000) Critical evaluation of the effect of valerian extract on sleep structure and sleep quality. *Pharmacopsychiatry*, **33**, 47–53.
98. Kuhlmann J, Berger W, Podzuweit H, Schmidt U (1999) The influence of valerian treatment on “reaction time, alertness and concentration” in volunteers. *Pharmacopsychiatry*, **32**, 235–241.
99. Schulz H, Stolz C, Müller J (1994) The effect of valerian extract on sleep polygraphy in poor sleepers: a pilot study. *Pharmacopsychiatry*, **27**, 147–151.
100. Balderer G, Borbély AA (1985) Effect of valerian on human sleep. *Psychopharmacology*, **87**, 406–409.
101. Lindahl O, Lindwall L (1989) Double blind study of a valerian preparation. *Pharmacology, Biochemistry and Behavior*, **32**, 1065–1066.
102. Leathwood PD, Chauffard F, Heck E, Munoz-Box R (1982) Aqueous extract of valerian root (*Valeriana officinalis* L.) improves sleep quality in man. *Pharmacology, Biochemistry, and Behavior*, **17**, 65–71.

SUPPORTING INFORMATION

Additional Supporting Information may be found in the online version of this article:

Table S1. Plant table.

Table S2. List of plants with anti-inflammatory properties.

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Phytotherapeutics: an evaluation of the potential of 1,000 plants

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SUPPLEMENTARY INFORMATION

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PLANTS TABLE

Rank. 3 - Clinical trials, in-vivo experiments, reviews.

Rank. 2 - In-vivo, ex-vivo and in vitro experiments, reviews.

Rank. 1 - Phytochemical studies, reviews.

Rank. 0 - Absence of peer-reviewed articles, few general monographs.

Rank. -1 - Dangerous plants.

Name	Part	Synonims	Rankin g	Pharmacological properties
ABELMOSCHUS MOSCHATUS MEDIC.	semen	Hybiscus abelmoschus, annual hybiscus, ambrette, musk okra, musk mallow, muskdana	2	Antihyperglycemic, antioxidant
ABIES ALBA MILL.	conus, cortex, folium, gemma, oleum, resina	Silver fir, European silver fir	1	Antioxidant, antimicrobial
ABIES BALSAMEA MILL.	balsamum	Balsam Fir	1	Balsamic, antioxidant, antimicrobial
ABIES FRASERI LINDL.	balsamum	Frase Fir	1	Balsamic
ABIES SIBIRICA LEDEB.	folium	Siberian fir	2	Antioxidant, antimicrobial, prophylactic anti-influenza
ABROMA AUGUSTA L.F.	cortex ex radicibus	Devil's Cotton	2	Hypoglycemic, hypolipidemic, antioxidant (antifertility)
ABRUS PRECATORIUS L.	folium, radix	Jequirity, Crab's Eye, Rosary Pea, John Crow Bead, Precatory bean, Indian Licorice	0	
ACACIA DECURRENS WILLD.	cortex, flos, gummi	Acacia bark, Early black wattle, Green wattle, Sydney wattle, Wattle bark	2	Antitumor, astringent, skin-conditioning agent-occlusive
ACACIA FARNESIANA WILLD.	flos	Needle Bush, huisache	2	Antimalarial, antibacterial, antifungal, bronchodilator, anti-inflammatory, hypoglycemic

ACACIA NILOTICA WILLD EX DEL.	gummi	Thorn mimosa, Mimosa nilotica	2	Antioxidant, antimicrobial, antibiotic, treatment of alpha-2-adrenoceptor related diseases, antiviral, antifungal, antidiarrhoea, treatment of enteric diseases, antiplasmodial (antimalaric), antiinflammatory, antimutagenic, anticarcinogenic
ACACIA SENEGAL. WILLD.	cortex, gummi	Rudraksha, Gum Acacia, Gum Arabic Tree, Gum Senegal Tree	2	Antioxidant, benefits in renal disease, anti-nutritional
ACACIA SUMA KURZ. .	gummi, lignum,	White Thorn, Acacia catechu sensu, Acacia poliacantha, Mimosa suma	2	Hypoglycemic
ACALYPHA INDICA L.	folium, radix	Indian Nettle, copperleaf, Indian acalypha	2	Antioxidant, antimicrobial, post-coital antifertility activity
ACANTHUS MOLLIS L.	folium, herba, radix	Bear's Breech	2	Antimicrobial, antifeedant, cercaricidal
ACER CAMPESTRIS			0	
ACER NEGUNDO L.	cortex	Box Elder, Boxelder Maple, Maple Ash	2	Tumor inhibitor
ACER SACCHARINUM L.	cortex, lignum	Silver Maple, Creek Maple, River Maple, Silverleaf Maple, Soft Maple, Water Maple, White Maple	0	
ACHILLEA AGERATUM L.	herba c. floribus	Achillea decolorans, Achillea serrata	2	Cytostatic, antibacterial, anti-inflammatory, Spasmolytic
ACHILLEA ATRATA L.	herba c. floribus		2	Antifungal, antimicrobial
ACHILLEA ERBA-ROTTA ALL.	herba	Camomilla di montagna, Peverina	1	Antioxidant
ACHILLEA ERBA-ROTTA SSP MOSCHATA RICH.	herba c. floribus, capitula, oleum	Musk Milfoil, Achillea moschata	1	Antioxidant

ACHILLEA MILLEFOLIUM L.	herba c. floribus, capitula	Yarrow, Nosebleed plant, Old Man's Pepper, Sanguinary, Soldier's Woundwort, Thousand-leaf, Thousand-seal	2	Antitripanosoma, estrogenic activity, choleretic, spasmolytic, tumor cytotoxicity, anti-inflammatory, antioxidant, antimicrobial, hepatoprotective, antispasmodic and calcium antagonist
ACHILLEA NANA L.	herba c. floribus	Dwarf Alpine Yarrow	1	Antioxidant
ACHILLEA PTARMICA L.	radix, herba c. floribus, capitula	Sneezewort, Sneezeweed, Bastard Pellitory, European Pellitory, Fair-maid-of- France, Goose Tongue, Sneezewort Yarrow, Wild Pellitory, White Tansy	1	Antioxidant
ACHRAS SAPOTA L.	flos	Chiku tree, sapodilla, chico, sapodilla, Sapota achras, Sapota zapotilla	2	Antioxidant , anti-inflammatory, analgesic and antipyretic activity
ACTINOMERIS HELIANTHOIDES NU	radix	Gravelweed, Gravelweed Crownbeard, Sunflower Crown Beard, Yellow Crownbeard, Actinomeris oppositifolia, Phaethusa helianthoides, Pterophyton helianthoides, Verbesina helianthoides	0	
ADANSONIA DIGITATA L.	cortex, folium, radix, semen	Baobab, Cream of Tartar tree, Monkey-bread tree, Lemonade tree, Upside- Down Tree, Juda's Fruit, Bottle Tree, Mbuyu, Gorakha chinch	2	Antimicrobial, antifungal, anticomplement, antiviral (HCV), antitripanosomic, antisickling, hypotensive, antiasthmatic, anti- inflammatory, diaphoretic, antidiarrhoeal, antidysenteric
ADHATODA VASICA NEES	herba, folium, radix	Malabar Nut, Adalodakam	2	anti-inflammatory, antimicrobial, anti-ulcer, potentiates macrophage phagocytic activity
ADIANTUM CAPILLUS-VENERIS L.	folium, herba	Common maidenhair	2	Antiviral

ADIANTUM PEDATUM L.	folium, herba	Northern maidenhair	2	Antitumor, treatment/prevention of dermatological diseases
ADOXA MOSCHATELLINA L.	herba	Moschatel, Townhall Clock, muskroot	1	
AEGLE MARMELOS CORREA	cortex, folium, radix, semen	Bael, Bael tree, Bel-fruit, Bengal quince, Indian bael, Marmelo, Sirphal, Wood apple	2	Antiulcer, antidiarrhoeal (Vibrio colera, Salmonella), anthelmintic, astringent, anti-inflammatory, antifungal, antiviral, radioprotective
AEGOPODIUM PODAGRARIA L.	herba	Snow-on-the-Mountain, Bishop's Weed, Bishop's goutweed	2	Antifungal, antioxidant
AESCULUS HIPPOCASTANUM L.	cortex, flos, folium	Horse chestnut	2	Antioxidant, skin-care, antimicrobial, gastroprotective, anti-inflammatory
AFRAMOMUM EXSCAPUM HEPPER	semen		1	
AFRAMOMUM MELEGUETA K. SCHUM.	semen	Guinea pepper, Melegueta pepper, Alligator pepper, Guinea grains, Grains of paradise, Amomum melegueta	2	Immunomodulatory, modulates inflammatory response, anti-inflammatory, against skin hyperpigmentation, antifungal, antiparasitic, antioxidant, antimicrobial, increasing sexual arousal
AGATHIS DAMMARA L.G. RICH.	resina		0	
AGAVE AMERICANA L.	folium, radix	Century Plant, Maguey	2	Antibacterial, antiinflammatory
AGAVE SISALANA PERR.	folium, radix	Sisal, Sisal hemp	2	Platelet-activating factor (PAF) receptor binding inhibition, neuromuscular blocking activity, antibacterial. Hemolytic activity
AGRIMONIA ODORATA AUCT.	folium, herba, summitas		0	
AGRIMONIA EUPATORIA L.	folium, herba, summitas	Common agrimony, Church steeples, Sticklewort	2	Antioxidant, antimicrobial, antifungal, antiviral, antihyperglycemic, insulin-releasing and insulin-like activity

AGROPYRON REPENS BEAUV.	rhizoma	Couch Grass, Quack grass, Elymus repens, Elytrigia repens, Triticum repens	0	
AJUGA CHAMAEPITYS SCHREB.	flos, folium,herba c. floribus	Ground pine, yellow bugle	1	Antioxidant
AJUGA IVA SCHREB.	summitas	French Ground Pine, Southern groundpine, Herb Eve, Musky Bugle, Herb Ivy, Iva moscada, Ajuga humilis, Ajuga moschata	2	Vasorelaxant, hypoglycemic effect
AJUGA REPTANS L.	folium, herba c. floribus	Blue bugle, Bugleherb, Bugleweed, Carpetweed, Common bugle	1	
ALBIZIA ANTHELMINTICA BRONGN.	cortex	Mucenna albizia, Besenna anthelmintica	2	Anthelmintic, anti-Candida
ALCHEMILLA ALPINA L	herba	Alpine Lady's Mantle	0	
ALCHEMILLA VULGARIS L.S.L.	folium, herba, radix	Lady's Mantle, Lions Foot, Common Lady's Mantle, bear's foot, common alchemil	3	Antioxidant, anxiolytic, treatment of aphthous stomatitis, thyroid stimulant, anti- elastase activity and refirming properties, antidiabetic
ALETRIS FARINOSA L.	bulbus, radix	White colicroot, Stargrass, Unicorn Root	0	Antirheumatic
ALGA KLAMATH		Blue-green algae	0	Nutritional therapy
ALGA WAKAME'		Undaria pinnatifida, Wakame	2	Antitumor, antibacterial, antioxidative, suppression of the production of leukotrienes.
ALISMA ORIENTALE JUZEP.	rhizoma	Alisma plantago-aquatica L, water plantain	2	Reversal of multidrug resistance in cancer cells (Effective inhibitors of P-glycoprotein), hypotensive, vasorelaxant, antianemic, antioxidant, anti-complementary activity, ovulatory disorders

ALISMA PLANTAGO AQUATICA L.	rhizoma, folium	American Waterplantain, Great Water-plantain, Marsh Drain, Mad-Dog Weed	2	Anti-complementary activity
ALKANNA TINCTORIA TAUSCH.	radix	Anchusa, Dyer's Bugloss, Spanish Bugloss, Orchanet	3	Antibiotic activity, radical scavenger, antioxidant, topoisomerase I inhibitor, antimicrobial, wound healing properties.
ALKANNA TINCTORIA TAUSCH.	semen, herba	Anchusa, Dyer's Bugloss, Spanish Bugloss, Orchanet	3	Antibiotic activit , radical scavenger, antioxidant, topoisomerase I inhibitor, antimicrobial, wound healing properties.
ALNUS GLUTINOSA GAERTN.	cortex, folium	Black Alder, European Alder or Common Alder	3	Sublingual immunotherapy
ALOE AFRICANA MILL.	succus inspissatus		2	Laxative agent, bittering, antihistaminic (antiallergic), hypoglycemic
ALOE FEROX MILL.	succus inspissatus	Bitter Aloe, Red Aloe	2	Antioxidant, skin diseases, antibacterial, anti-inflammatory (arthritis)
ALOE PERRYI BAK.	succus inspissatus		2	Hypoglycemic, hyperinsulinemic, antibacterial, cytotoxic on tumor cells
ALOE PLICATILIS MILL.	succus inspissatus	Aloe lingua Thunb, Aloe linguiformis	2	Anti-inflammatory activity (arthritis), skin disease
ALOE VERA L.	succus inspissatus	A. barbadensis Mill, A. vulgaris Lam	2	Antimutagenic, antileukemic activities, laxative, prevention of atherogenic processes (therapeutic alternative for hyperlipidemia), antioxidant, hematopoietic, hypoglycemic, antibacterial, insecticidal, wound healing remedy for skin damaged, antifungal.
ALPINIA GALANGA WILLD.	rhizoma	Greater galangal, Languas galanga, Blue ginger, Thai ginger	2	Immunostimulating, expectorant activity
ALPINIA OFFICINARUM HANCE	rhizoma	Smaller galanga, Lesser galangal, Languas officinarum	2	Antioxidant, inhibitor of fatty-acid synthase, antifungal.
ALSIDIUM HELMINTHOCHORTON K.	thallus		1	Nutrition.

ALTHAEA OFFICINALIS L.	flos, folium, radix	Marshmallow, Marsh Mallow, or Common Marshmallow	3	Anticancer (human leukemic cell), anticomplement activity, immunomodulatory activity, antitussive, anti-inflammatory, antioxidant, prevention and treatment of osteoporosis, irritated buccal membranes, antibacterial.
ALTHAEA ROSEA L.	flos	Alcea rosea, Common Hollyhock, Althaea chinensis, Althaea ficifolia, Althaea rosea.	2	Vasoprotective agents, antiviral (HIV-1 and 2), expectorant, diuretic
AMOMUM XANTHIOIDES WALLICH	semen	Bastard Cardamom, Chin Kousha, Malabar Cardamom.	2	Antihistaminic, anti-inflammatory.
AMORPHOPHALLUS KONJAC KOCH	tuber, amylum	Konjac, konjaku, devil's tongue, voodoo lily, snake palm, or elephant yam	2	Immunomodulatory, hypocholesterolemic activity, hypoglycemic, antioxidant, immunologic stimulating, treatment of obesity, hyperlipidemia.
AMYRIS BALSAMIFERA L.	lignum	Balsam Torchwood	2	Antimalarial activity, larvicidal activity, antimicrobial.
ANACARDIUM OCCIDENTALE L.	folium, fructus, radix	Acajuba occidentalis, Anacardium microcarpum, Cassuvium pomiverum, Cashew	2	Anti-Helicobacter, anti-rotavirus, antiulcerogenic, cutaneous wound healing, antioxidant, antimicrobial, bactericidal, anti-inflammatory, antihypertensive and antidiarrhea.
ANACYCLUS PIRETHRUM LINK	radix	Pellitory, Spanish chamomile, or Mount Atlas daisy	2	Inhibitory effects on hepatitis C virus (HCV) protease (PR), immunostimulating activity, antioxidants, antimicrobial, antibacterial.
ANANAS SATIVUS		Pineapple	2	Antiviral, proteolytic activity.
ANCHIETEA SALUTARIS ST. HILL.	radix		2	Anti-allergic
ANDROGRAPHIS PANICULATA NEES	folium, herba, radix, summitas	Kalmegh, Andrographis, Kiryat, senshinren, kirata.	3	Antiviral, hepatoprotective, antithrombotic, immunostimulant, choleric, cell differentiation-inducing, antibacterial,

				antifertility, anti-inflammatory, antihyperglycemic, hepatoprotective, antioxidant.
ANEMOPAEGMA MIRANDUM MART EX DC	cortex	Erythroxylum Catuaba, Erythroxylon catuaba martius	2	Skin protective.
ANETHUM GRAVEOLENS		Dill, Dillby.	2	Elastogenesis efficiency, antiradical activity, regulatory agent of the menstrual cycle, mucosal protective, antisecretory effects of the gastric mucosa, antifertility agent, antimycobacterial, antimicrobial, antibacterial, antioxidants.
ANGELICA ARCHANGELICA L.	folium, fructus, radix, herba, oleum	Garden angelica, Holy Ghost, Wild Celery, Norwegian angelica.	2	Antitumour, free radical scavenger, digestive health, antiulcerogenic, hepatoprotective, influence on human keratinocytes, on human liver cells and on adhesion of Helicobacter pylori, antioxidants, antimicrobial.
ANGELICA SINENSIS DIELS.	fructus, radix	Female ginseng, Dang-Gui, Dong quai.	2	anticancer, anti-apoptotic, gynecological disorders, antidiabetic, anxiolytic, cardiovascular diseases, antithrombotic, cardioprotective, renal protective, antifibrotic, antioxidant, anti-inflammatory, immunomodulatory activity, hepato-protective effect.
ANGELICA SYLVESTRIS L	fructus, herba, radix, summitas		1	
ANIBA ROSAEODORA DUCKE	lignum, oleum	Rosewood, Pau rosa, Bois de rose femelle, Pau ferro.	1	Antimicrobial, antifungal activity.
ANNONA MURICATA	flos, folium, radix, semen	Graviola, soursop, guanábana.	2	Anti-tumor, antiviral (HSV-1), anti-depressive, antioxidant, anti-inflammatory, anti-stress activity, antibacterial, antiparasitic.

ANNONA RETICULATA L.	radix, semen	Bullock-heart, Custard apple, Jamaica apple, Sweetsop.	2	Potentially anticancer, antiplatelet, vasorelaxing activity, anti-inflammatory.
ANNONA SQUAMOSA L.	folium, radix	Custard apple, Sugar-apple, Sweetsop.	2	Anthelmintic, anti-head lice, antibacterial, potential oral rehydration, antidiabetic.
ANOGEISSUS LATIFOLIA WALL.	gummi	Gum ghatti, Dhaora, Dhava.	2	Antiulcer, antimicrobial, antianemic, skin diseases, antioxidant.
ANREDERA BASELLOIDES BAILE	tuber	Madiera Vine, Mignonette Vine, Gulf Madeira vine, Bridal wreath, Cascade creeper, Lamb's tail.	1	Trypsin inhibitory and stimulatory activities in nitric oxide productions, hypoglycemic.
ANTENNARIA DIOICA GAERTN.	capitula, herba	Mountain Everlasting, Catsfoot, Cudweed or Stoloniferous Pussytoes.	1	
ANTHEMIS COTULA L.	herba c. floribus	Mayweed, Dog-fennel.	1	Antimicrobial.
ANTHEMIS TINCTORIA L.	capitula, herba c. floribus, radix	Golden Marguerite, Yellow Chamomile.	1	Antibacteric.
ANTHOXANTHUM ODORATUM L.	folium, herba c. floribus, radix, summitas	Spring grass, Sweet vernalgrass.	0	
ANTHRISCUS CEREFOLIUM		Chervil	2	Antioxidant, radical scavenger properties.
ANTHRISCUS SYLVESTRIS HOFFM.	fructus, herba	Cow Parsley, Wild Chervil, Wild Beaked Parsley, Keck.	2	Antioxidant, antiasthmatic, anti-inflammatory, anti-pigmentation, anti-rotavirus infection, anti-allergic, insecticidal.
ANTHYLLIS VULNERARIA L.	flos, herba	Kidney vetch.	1	Mutagenic, hemolytic
ANTIRRHINUM MAJUS L.	herba	Snapdragon	1	
APHANES ARVENSIS L.	folium, herba c. floribus	Field parsley piert, Alchemilla arvensis, Field Lady's Mantle, Parsley Breakstone.	0	

AQUILARIA AGALLOCHA ROXB.	lignum	Agarwood, Eaglewood tree.	1	Sedative, antipsychotic
AQUILARIA MALACCENSIS LAM.	lignum	Agarwood, Aloewood, Eaglewood, Lign-aloes.	2	Central nervous system depressant activities, antipsychotic, anticancer.
ARALIA RACEMOSA L.	radix	Spikenard	1	
ARBUTUS UNEDO L.	flos, folium, radix	Strawberry tree	2	Potential cancer chemopreventive, treatment of platelet aggregation, potent antioxidant activity, vasorelaxant activity due to polyphenol compds, anti-hypertension.
ARCTIUM LAPPAL.	fructus, herba, radix, oleum	Lappa, Fox's Clote, Thorny Burr, Beggar's Buttons, Cockle Buttons, Love Leaves, Philanthropium, Personata, Happy Major, Clot-Bur.	3	Antitussive, anti-coagulation, antiproliferative and apoptotic effects (anticancer), potential anti-HIV activity, antibacterial activity, hepatoprotective, anti-inflammatory, radical scavenger, antiestrogenic, antihypertensive.
ARCTIUM MINUS BERNH.	folium, fructus, radix	Lesser burdock.	1	Antioxidant
ARCTIUM TOMENTOSUM MILL	radix	Woolly burdock.	1	
ARCTOSTAPHYLOS UVA- URSI SPRE.	folium	Bearberry, Kinnikinnick, Pinemat Manzanita, Carillo, Mealberry, Mountain Box, Mountain Cranberry, Sandberry, Sagackhomi, Bear's Berry and Arberry.	2	Free-radical scavenger, urinary antiseptic and anti-adhesion herbs, inhibitory on melanin biosynthesis, antioxidant, potential antibacterial and antidiabetic.
ARMORACIA RUSTICANA GAERNT	radix	Horseradish, Creole mustard, German mustard, Red horseradish.	2	Anti- cancer (colon cancer), antioxidant, insecticidal activity
ARNICA MONTANA L.	capitula, herba c. floribus, radix, folium, summitas	Leopard's bane, Wolf's bane, Mountain tobacco, Mountain arnica.	3	Inhibition of platelet function, anti-inflammatory, hepatoprotective, less postoperative swelling, small decrease in pain after tonsillectomy, suppression of the melanin accumulation, osteoarthritis topical

				application, antibacterial, antimicrobial.
ARONIA MELANOCARPA		Chokeberry, Black chokeberry.	3	Chemoprotective activity, anti-platelet, antimutagenic, radical scavenger, anti-inflammatory, vasoprotective, gastroprotective, hypoglycemic, hypolipidemic, antioxidant.
ARTEMISIA ABSINTHIUM L.	capitula, herba c. floribus, folium	Absinthium, Absinthe Wormwood, Wormwood or Grand Wormwood.	3	Antiradical and antioxidative activity, for Crohn's disease, antipyretic, antiseptic, hepatoprotective, antimicrobial, antibacterial, for gastric pain.
ARTEMISIA CAMPESTRIS L.	capitula, herba, folium, summitas	Tall Wormwood.	1	Antioxidant.
ARTEMISIA CAPILLARIS THUNB.	herba	Oriental Wormwood, Virgate Wormwood, Capillaris.	3	Antiviral (HIV, hepatitis B), antibacterial, antifungal, choleric activity, potent anti-apoptotic activity, anti-inflammatory, vasodilator.
ARTEMISIA CHINENSIS L.	folium		0	
ARTEMISIA DRACUNCULUS		Tarragon.	2	Antispasmodic, anticonvulsant and sedative effects, antihyperglycemic, anticomplementary activity, treatment postoperative nausea and vomiting, antiplatelet, reduced the hyperphagia and polydipsia, antioxidant, antifungal.
ARTEMISIA FRIGIDA WILLD.	herba, summitas	Fringed Sagebrush, Sagebrush, Prairie sagewort, Fringed wormwood, Arctic sagebrush.	1	
ARTEMISIA GENIPI WEBER	flos, herba c. floribus, summitas		1	

ARTEMISIA GLACIALIS L.	herba c. floribus, summitas		1	
ARTEMISIA JUDAICA LOUR.	herba c. floribus		1	Antioxidant, antimicrobial, gastrointestinal disorders.
ARTEMISIA MARITIMA BERTOL.	herba c. floribus, folium, summitas	Sea Wormwood	1	Hepatoprotectivity, antioxidant, antifungal.
ARTEMISIA NANA GAUD.	herba c. floribus		0	
ARTEMISIA PALLENS WALL EX OC	herba c. floribus, summitas	Davana	2	Antinociceptive, sedative, hypnotic effect, hypoglycemic effect.
ARTEMISIA PONTICA L.	herba c. floribus	Roman Wormwood .	1	
ARTEMISIA PROCERA WILLD.	herba c. floribus, summitas	Artemisia abrotanum.	0	
ARTEMISIA UMBELLIFORMIS LAM.	herba c. floribus	Alps wormwood, Artemisia laxa - (Lam.)Fritsch.	1	
ARTEMISIA VALLESIACA ALL.	herba c. floribus, summitas	Mountain wormwood	1	
ARTEMISIA VERLATORUM LAMOT.	herba c. floribus		2	Strong vasodilator action, anticonvulsant and analgesic, antifungal.
ARTEMISIA VULGARIS L	capitula, herba c. floribus, radix, folium, rhizoma	Mugwort or Common Wormwood.	2	Immunotherapy, hepatoprotective activity, microvascular actions, potential antimalarial, antioxidant, antimicrobial, antibacterial, anthelmintic.
ARTEMISIA ABROTANUM L.	folium, herba, summitas	Southernwood.	0	
ARTOCARPUS ALTILIS FOSBERG	lignum, semen	Breadfruit, Breadnut, Artocarpus communis, Artocarpus incisus.	2	Weak scavenger, cytoprotective effects (antiatherosclerotic), 5a -Reductase inhibitory, inhibitory of tyrosinase, insecticidal activity, cathepsin inhibition, anti-inflammatory activities.
ASCOPHYLLUM NODOSUM DE JOLIS	thallus	Knotted wrack or Egg wrack.	2	Potent antitumor, antithrombotic activity, anticoagulant activity, reduce oxidative stress

ASIMINIA TRILOBA DUNAL	folium, semen	Pawpaw.	3	Anticancer agent.
ASPARAGUS OFFICINALIS L.	radix, rhizoma	Asparagus	2	Radical-scavenger, antioxidant, diuretic, laxative, inhibitory effects against cyclooxygenase-1 and -2.
ASPLENIUM ADIANTUM NIGRUM L.	folium	Black Spleenwort	1	
ASPLENIUM RUTA MURARIA L.	herba	Asplenium matthioli	0	
ASPLENIUM TRICHOMANES L.	folium	Maidenhair Spleenwort	1	Antioxidant
ASTRAGALUS ADSCENDENS B. ET H.	gummi	Persian Manna, Astracantha adscendens	0	
ASTRAGALUS CRETICUS LAM.	gummi		0	
ASTRAGALUS GUMMIFER LABILL	gummi	Gum tracanth	2	Antimicrobial, potential anticancer
ASTRAGALUS MEMBRANACEUS BUNG.	radix	Huang-Qi, membranous milk-vetch root, Astragalus mongholicus dahuricus, Astragalus penduliflorus membranaceus	3	Adaptogen, tonic, antibacterial, antiviral, antioxidant, antiaging, anti-inflammatory, antinociceptive, anticancer, cardiotonic, diuretic, febrifuge, hypoglycemic, hypotensive, vasodilator, antiperspirant, immunostimulating, cardioprotective (myocarditis), stimulates human sperm motility, menopausal diseases
ASTRAGALUS MICROCEPHALUS W.	radix	Astracantha microcephala	2	Antioxidants and antimicrobial agents that might serve to protect health and fight against several diseases, immunomodulatory and anticancer effects
ASTRAGALUS VERUS OLIV.	gummi		3	Antiperspirant, diuretic, tonic, hepatoprotective, antioxidative, immunostimulant, antiviral, adjuvant in Pt-based chemotherapy
ASTRANTIA MAJOR L.	radix	Great Masterwort	1	

ATHAMANTHA CRETENSIS L.	flos, folium, fructus, herba, summitas	Candy Carrot, Daucus Creticus	0	
ATHAMANTHA MACEDONICA SPR.	fructus, herba	Bubon macedonicum	1	
ATHEROSPERMA MOSCHATUM LABIL.	cortex, folium	Sassfras heartwood	1	
AURICULARIA AURICULA-JUDAE B.	carpophorum	Wood ear, cloud ear mushroom, Judas' ear fungus, Auricularia auricula, Hirneola auricula-judae	2	Anticancerous, antibacterial, antiviral, antifungal, antidiabetic, anti-inflammatory, antioxidant, cardiovascular disorders, anti- complementary activity, anticoagulant
AVERRHOA CARAMBOLA L.	folium	Carambola, star fruit	2	Antioxidant, antimicrobial, improving intestinal functions and health, activity against brain tumor cells, hypoglycemic, depressant action, negative inotropic and chronotropic effects. Convulsant activity and neurochemical alterations, non-convulsive status epilepticus and consciousness disturbance
BALANITES AEGYPTIACA DEL.	cortex, folium, fructus, semen	Morrtorde	2	Antidiabetic, antineoplastic, hypocholesterolemic, anti-inflammatory, antinociceptive, antioxidant, hepatoprotective, antiCandida, antiviral
BALLOTA NIGRA L. SSP FOETIDA HAYEK	herba, herba c. floribus, folium	Black Horehound, Ballota, Black Stinking Horehound	2	Antibacterial, neurosedative, antioxidant, anxiolytic, antidepressant
BAMBUSA VULGARIS		Bambù	2	Stomach problems, pain and internal parasites, hypoglycemic
BAPTISIA TINCTORIA R. BR.	radix	Yellow false indigo, horseflyweed	2	Prevention and treatment of common cold and influenza-like symptoms, immunomodulatory effect (enhances the antibody response), fungicidal

BARBAREA VULGARIS R. BR.	herba	Bittercress, Herb Barbara, Rocketcress, Yellow Rocketcress, Winter Rocket, Wound Rocket	1	Nutrition
BAROSMA BETULINA BART ET WEN	folium	Round leaf buchu, Agathosma betulina	2	Antimicrobial, anti-inflammatory, cytotoxic cancer cells, antioxidant, spasmolytic
BAROSMA CRENULATA HOOK	folium	Oval leaf buchu, Agathosma crenulata	2	Antimicrobial, anti-inflammatory, cytotoxic cancer cells, antioxidant, spasmolytic
BAROSMA SERRATIFOLIA WILLD.	folium	Long Buchu, Agathosma serratifolia	2	Antimicrobial, anti-inflammatory, cytotoxic cancer cells, antioxidant, spasmolytic
BELLIS PERENNIS L.	capitula, folium	Common Daisy, Lawn Daisy, English daisy	3	Reduction of postpartum blood loss, skin- lightening, potential anticancer, antimicrobial, antifungal
BERBERIS ARISTATA DC	cortex arboris	Nepal Barberry, Berberis coriaria, Berberis chitria	3	Antioxidant, possible anti-inflammatory, hepatoprotection, protection against chemical carcinogenesis, antibacterial (colera), antiamoebic, antifungal, anthelmintic, leishmanicidal, tuberculostatic
BERBERIS VULGARIS L.	cortex ex radicibus, folium, semen	Common barberry, European Barberry	2	Antioxidant, antimicrobial, antinflammatory, antiarrhythmic, hypotensive, sedative and neuroprotective effects
BERGENIA CRASSIFOLIA FRITSCH	folium	Elephant-ears	2	Antioxidant, immunostimulating activity, cytotoxic, sedative, antimicrobial
BETULA LENTA L.	cortex, folium, oleum	Black birch	0	Allergenic
BETULA PENDULA ROTH.	cortex, folium, gemma, resina	Silver birch	3	Sublingual immunotherapy and long-term prevention of asthma
BIDENS TRIPARTITA L.	herba	Three-lobed Beggarticks	2	Anticancer
BIGNONIA QUINQUEFOLIA L.	folium	Cybistax antisiphilitica	1	Larvicidal

BIXA ORELLANA L.	semen	Annatto	2	Antioxidant, antileishmanial, antifungal, anticonvulsant, analgesic, antidiarrhoeal, antimicrobial, anticlastogenic, hypoglycemic, skin diseases, antihemorrhagic
BORONIA MEGASTIGMA NEES	herba	Brown boronia, Scented Boronia	0	
BORRAGO OFFICINALIS		Borage	2	Antioxidant
BOSWELLIA CARTERII BIRDW.	resina, gummi	Frankincense tears-small, Bible frankincense	2	Cancer chemopreventive, cytotoxic, antiinflammatory, immunomodulatory, nematocidal, fungicidal, antiviral (HCV, herpes), antimicrobial, hepatoprotective
BOVISTA PLUMBEA PERS.	carpophorum	Paltry Puffball	1	Antibiotic
BOWDICHIA VIRGILIOIDES H.B.K.	cortex	Paricarana, Sapupira-açu, Sucupira, Sucupira-preta	2	Antimicrobial, antimalarial, cytotoxic
BRACHYCLADUS STUCKERTI SP.	herba, radix	Brachycladus herb	0	
BRUCEA FERRUGINEA L. HERIR.	cortex		0	
BRUCEA JAVANICA MERR.	fructus	Java Brucea	2	Chemopreventive, antitumor, antiparasitic, anti-diarrheic, antiviral (HBV), anti-tuberculosis
BRUNFELSIA HOPEANA BENTH.	radix	Brunfelsia uniflora, Manac, Manaca, Vegetable mercury	2	Spasmolytic, anti-inflammatory
BUPLEURUM ROTUNDIFOLIUM L.	herba	Thoroughwax	2	Antiproliferative, anti-inflammatory
BURSERA TOMENTOSA TRIA ET P.	resina, lignum	Mexican elemi, Vera Cruz elemi, Elaphrium jacquinianum	0	
BURSERA GUMMIFERA ENGL.	resina, lignum	Bursera simaruba, gumbilimbo	2	Antibacterial, anti-inflammatory
BUTOMUS UMBELLATUS L.	folium, rhizoma	Flowering-rush	0	Skin diseases, treatment of cancer

CAESALPINIA BONDOC ROXB.	folium, radix, semen	Gray Knickers, Gray Nickarbean, Sea Pearl, bonduc tree, bonduc, Caesalpinia bonducella	2	Antitumor, antioxidant, antidiabetic, hypolipidemic, antipyretic, analgesic, antimicrobial, adaptogenic, stimulates the muscle contractile activity
CAESALPINIA BREVIFOLIA ROXB.	fructus	Balsamocarpon brevifolium, algarobilla	1	Antioxidant, astringent
CAESALPINIA ECHINATA LAMK.	lignum	Brazilwood, Pau-Brasil, Pernambuco, Guilandina echinata	2	Anticoagulation, antifibrinolysis. Pro-inflammatory
CAKILE MARITIMA SCOP.	herba	European searocket, Bunias cakile, Cakile edentula	1	
CALAMINTHA NEPETA SAVI SSP. GLANDULOSA BALL.	folium, summitas	Lesser calamint	2	Antimicrobial
CALENDULA ARVENSIS L.	capitula	Field Marigold	2	Improves the rate of healing of surgical wounds, antiviral, antimutagenic
CALENDULA OFFICINALIS L.	capitula, herba	Pot Marigold, English Marigold	3	Treatment of venous leg ulcers, prevention of acute dermatitis, protection against contact dermatitis, anti-inflammatory, immunostimulating, antitumor, cytotoxic, antioxidant, hypoglycemic, gastric emptying inhibitory, gastroprotective, hepatoprotective, antibacterial, antiviral (HIV), sedative, hypotensive, spasmolytic (abdominal cramps), spasmogenic (constipation), antiulcerogenic, antiedematous, hemostatic control of the body, bioadhesive effects
CALLIANDRA HOUSTONI BENTH.	cortex ex radicibus	Mimosa houstoniana, M. houstoni, Anneslia houstoniana, Tree calliandra, panbotano	0	

CALLITRIS ARTICULATA LINK	gummi	Tetraclinis articulata, Thuja articulata , Callitris quadrivalvis, Cupressus articulata, Arartree, alerce, sandarac gum tree, gharghar, Arartree, alerce, sandarac gum tree, gharghar	3	Apoptosis-inducer, sedative, antidiabetic
CALLUNA VULGARIS HULL.	flos, herba c. floribus, summitas	Heather	2	Antimicrobial, antioxidant, antiproliferative, antitumor, anti-inflammatory
CALOPHYLLUM INOPHYLLUM L.	resina	Ballnut, tamanu	2	Anti-HIV, antimicrobial, cytotoxic, platelet-activating factor (PAF) inhibitor (antihypotensive), cancer chemopreventive, anti-inflammatory
CAMPHOROSMA MONSPELIACA L.	summitas		1	
CANAGA ODORATA HOOK F. ET TH.	flos, oleum	Ylang-Ylang	3	Skin penetration enhancer, antiinsomnia, anticonflict, harmonizing effect , relaxing effect, pediculicidal, relaxing effect on the bladder muscles, antimicrobial, antifungal, antioxidant
CANARIUM COMMUNE L	resina, semen	Canarium indicum, Java almond, Chinese olive, galip, galipnut, elemi, gummi elemi, Manila elemi, resina elemi	0	Prevention and therapy of hair loss
CANARIUM LUZONICUM A. GRAY	resina, semen	Elemi canary-tree, Manila elemi-tree.	1	
CAPSELLA BURSA-PASTORIS MED	herba	Shepherd's purse	2	Whitening agent for UV-sensitive skin, antitumor, antioxidant, increases contractile activity (uterus, intestine), antimicrobial, antibiotic, week hypotensive
CAPSICUM ANNUUM L.	oleum	Paprika, Chile pepper, Chili pepper, Chilli(es), Pepper, Red pepper	3	Antioxidant, antimicrobial, activates sympathetic nervous system (SNS) and enhances thermogenesis, cytotoxic, treatment

				of rheumatoid arthritis and diabetic neuropathy
CAPSICUM FRUTESCENS L.	oleum	Cayenne pepper, red pepper, Chili pepper, African Pepper, Bird Pepper, Goat's Pod, Mexican Chillies, Tabasco Pepper, Zanzibar Pepper	3	Antioxidant, effective reduction of low back pain, antifungal, anticancer, increases the upper gastrointestinal motility, antidiabetic
CARBO LIGNI	pulvis	Charcoal, Wood Charcoal, Carbo Vegetabilis.	3	Reduces intestinal gas, treatment of acute toxic ingestions, pharmaceutical drug overdoses, pediatric poisonings, hypercholesterolaemia, indicated for gastrointestinal decontamination, effective and safe in IBS
CAREX ARENARIA AUCT.NON L.	rhizoma	Sand Sedge	1	
CARISSA CARANDAS L.	cortex, lignum, radix	Karanda, Karonda, Karwand	2	Analgesic, anti-inflammatory, antioxidant, antimicrobial, emetic, purgative, cardiotonic
CARLINA ACAULIS SSP SIMPLEX NYMAN	radix	Carlina caulescens, Carlina simplex	0	
CARLINA ACAULIS L.	radix	Stemless carline thistle, Dwarf carline thistle, Silver thistle	2	Antimicrobial
CARPINUS BETULUS L.	folium	Hornbeam, European hornbeam, Musclewood, Ironwood	0	Allergenic
CARTHAMUS LANATUS L.	flos, fructus	Woolly distaff thistle, saffron thistle, distaff thistle, woolly safflower, woolly star thistle	2	Antimicrobial, anti-inflammatory, antioxidant, analgesic, citotoxic
CARUM CARVI L.	essentia	Caraway	2	Gastrointestinal disorders, antihypertension, anti-hyperglycemic, hypocholesterolemic, antioxidant, anticancer, diuretic, antibacterial

CARYA ALBA NUTT.	fructus, lignum	Carya tomentosa, Hicoria tomentosa, Juglans alba, mockernut hickory, white hickory	0	
CASCARILLA MACROCARPA WEDD.	cortex	Cinchona macrocarpa, Buena macrocarpa, Cinchona ovalifolia, Cinchona magniflora	0	
CASCARILLA MAGNIFOLIA WEDD.	cortex	Quina amarilla (Gachalá), Guacamayo, Cinchona magnifolia, Cascarilla magnifolia, Buena magnifolia, Cinchona grandifolia	0	
CASSIA ACUTIFOLIA DEL.	folium, fructus	Senna acutifolia, Alexandrian senna	3	Laxative. Abuse of senna causes chronic diarrhea. Unintentional ingestion of senna-containing laxatives in young children may potentially cause severe diaper rash, blisters, and skin sloughing
CASSIA ANGUSTIFOLIA VAHL.	folium, fructus	Tinnevelly Senna	3	Strong laxative, cathartic, topical anti-inflammatory. Their chronic abuse may be associated with serious manifestations, including fluid and electrolyte loss, with chronic diarrhea
CASSIA FISTULA L.	polpa fructus, fructus	Senna fistula, Golden Shower Tree, canafistula, Indian laburnum, purging fistula, purging cassia, woody bean	2	Laxative, antioxidant, hepatoprotective, antibacterial, antipyretic, analgesic, wound healing activity, cathartic, antifertility, antitumor, hypocholesterolaemic
CASSIA ITALICA F.W. ANDR.	folium	Senna Italica, Dog senna, Italian senna, Spanish senna	2	Laxative, antibacterial, antinociceptive, sedative, anti-inflammatory, antipyretic, analgesic
CASSIA NOMAME		Chamaecrista dimidiata	2	Laxative, anti-clastogenic, lipase inhibitory activity (weight loss), antidiabetic

CASSIA OCCIDENTALIS L.	folium, radix	Senna occidentalis, Coffee Senna, mogdad coffee, stinking weed, styptic weed, Fedegoso, coffeeweed.	2	Antimalarial, antibacterial, hepatoprotective, dermatophyte infections, laxative
CASSIA SENNA L.	folium, fructus	Senna, Senna alexandrina	2	Laxative, antimutagenic. Toxicity (alone or combined with different drugs/plants) diarrhoea, inappetence, loss of condition, dyspnea, ruffled hair and enterohepatonephrotoxicity, anemia
CASSIA TORA L. S.L.	folium, semen	Foetid cassia, tora, sickle senna, sickle pod, coffea pod, tovara, chakvad, juemingzi, Cassia tea	2	Treatment of plaque and caries, hypolipidemic, antinociceptive, smooth muscle contracting activities, antifungal, antioxidant, antigenotoxicity, antibacterial, purgative, antihepatotoxic, hypotensive
CASTANEA VESCA		Chestnut, Sweet Chestnut, Castanea sativa, C. vulgaris	3	Astringent, antioxidant, antimicrobial, anthelmintic, cytotoxic. Allergenic.
CASTILLOA ELASTICA CERV.	latex	Panama rubber tree, Mexican rubber tree, uletree, Castilla elastica	1	Edible fats or oils, cardiac glycosides
CASTOR FIBER L.	glandulae	Eurasian beaver	0	ANIMAL ORIGIN
CATALPA BIGNONIOIDES WALT.	folium	Catalpa	2	Prominent anti-inflammatory and antinociceptive actions, antioxidant
CEANOTHUS AMERICANUS L.	cortex, radix, folium	New Jersey tea	2	Blood coagulating, antimicrobial
CECROPIA PELTATA L.	folium	Trumpet tree, snakewood, congo pump, wild pawpaw, pop-a-gun	3	Wound-healing potential, antimicrobial, hypertension
CEDRELA TOONA ROXB.	flos, lignum, semen	Toona cliata, heart wood	2	Anti-ulcer, leishmanicidal, analgesic, antimicrobial, antifungal
CEDRUS LIBANI		Lebanese Cedar, Cedar of Lebanon, Cedrus libanitica	2	Antimicrobial, antiulcerogenic (anti-Helicobacter pylori activity)

CEIBA PENTANDRA GAERTN.	semen	Kapok, Kapok tree, Ceiba, Silk-cotton tree	2	Antibacterial, antidrepanocytary activity (anti-sickle cell anemia), hypoglycemic, antioxidant, trypanocidal, anti-inflammatory
CENTAUREA BEHEN L.	radix	Saw-leaved centaury	2	Roots: treatment of fistula and gravel, calculus affections and jaundice. Seeds: remedy for stone. Cytotoxic
CENTAUREA CALCITRAPA L.	capitula, herba, flos,radix, folium	Purple Star Thistle, red star-thistle, Caltrop	2	Hypoglycemic, antibiotic activity, antioxidant
CENTAUREA CYANUS L.	flos	Cornflower, garden cornflower, Bachelor's Button	2	anti-inflammatory, anticomplement (minor ocular inflammations)
CENTAUREA JACEA L.	herba c. floribus	Brown knapweed	1	Antioxidant
CENTAUREA MONTANA L.	capitula	Perennial Cornflower, mountain bluet, Mountain Cornflower, Perennial Bachelor's Button	2	Anticancer
CENTELLA ASIATICA L.	herba, folium	Gotu Kola, Asiatic Pennywort, Antanan, Pegaga, Kula kud, Brahmi, pohe kula, spadeleaf, Hydrocotyle asiatica	3	Accelerates the repair of damaged neurons, stimulates neuronal dendritic growth, protects neurons from the oxidative damage, cytotoxic, anti-tumour, microcirculation activator, antioxidant, treatment of chronic venous insufficiency and various skin diseases, wound healing promoter, cardioprotective, anti-hepatoma, antibacterial, antiviral
CENTRANTHUS RUBER DC	radix	Red valerian, Jupiter's Beard, Keys to Heaven	1	Sedative, antioxidant
CERCIS SILIQUASTRUM		Judas Tree	2	Antimalarial
CEREUS GRANDIFLORUS MILL.	flos	Selenicereus grandiflorus, sweet-scented cactus, vanilla cactus, large-flowered cactus, queen of the night	2	Cardiotonic, treating depressive states and depression and other emotional disorders

CETERACH OFFICINARUM DC	folium, rhizoma	Rustyback, Asplenium ceterach, Scale Fern	2	Diuretic, antimalarial
CETRARIA ISLANDICA ACH.	thallus	Iceland Moss, Iceland Lichen	2	Immunomodulating, immunologically active, anti-proliferative, enhancer of phagocytosis, antitumor, antioxidant, antimycobacterial, antimicrobial, antiviral (HIV), inhibitor 5-lipoxygenase, antiulcer
CHAMAEMELUM NOBILE ALL.	herba, oleum	Roman chamomile, Anthemis nobilis	3	Anti-inflammatory, sedative, antioxidant, antimicrobial, anticandida, hypoglycemic, palliative care (aromatherapy)
CHELONE GLABRA L.	herba c. floribus	Turtlehead, white turtlehead, Balmony	2	Tonic for the liver and digestive system, anti-depressant, laxative effects, antibilious, aperient, appetizer, cathartic, cholagogue, detergent, tonic, vermifuge
CHENOPODIUM BOTRYS L.	herba	Jerusalem oak goosefoot, Jerusalem Oak	2	Antimicrobial, antifungal
CHENOPODIUM VULVARIA L.	herba, folium	Stinking Goosefoot, Chenopodium olidum	0	
CHIMAPHILA UMBELLATA BARTON	cortex, herba, radix, folium, summitas	Umbellate Wintergreen, Pipsissewa	1	
CHIOCOCCA ALBA HITCH.	radix	Blolly, West Indian snowberry, Timaque	2	Antimicrobial
CHIONANTHUS VIRGINICA L.	cortex ex radicibus	Grancy Gray Beard, Old man's beard, White Fringetree, American fringetree, Fringe Tree, Poison Ash, flowering ash, graybeard tree, shavings, snowdrop tree, snowflower	1	Antioxidant
CHLOROSTIGMA STUCKERTIANUM K.	radix, folium	Chlorostigmatis	0	

CHRYSANTHELLUM AMERICANUM	herba	Anthemis americana, Chrysanthellum indicum subsp afroamericanum	3	Hepatotropic and digestive system stimulant, vasculotropic, anti-lithiasis, anti- inflammatory. Indications: increase biliary secretion, intoxications and digestive upsets, calculus, entero-colitis, cholesterol. Treatment of rosacea
CHRYSANTHELLUM AMERICANUM VATKE	herba	Anthemis americana, Chrysanthellum indicum subsp afroamericanum	3	Hepatotropic and digestive system stimulant, vasculotropic, anti-lithiasis, anti- inflammatory. Indications: increase biliary secretion, intoxications and digestive upsets, calculus, entero-colitis, cholesterol. Treatment of rosacea
CHRYSANTHEMUM BALSAMITA DESF.	capitula, herba, folium	Balsamita major, Tanacetum balsamita, Alecost, Costmary, Bible leaf	2	Hepatoprotector, antioxidant
CHRYSANTHEMUM COCCINEUM WILL	capitula, radix	Chrysanthemum roseum, Tanacetum coccineum, Pyrethrum roseum, pyrethrum	0	Insecticide
CIBOTIUM BAROMETZ J.SM.	palea	Scythian Lamb, Cibotium assamicum	1	Anti-inflammatory, antirheumatic, hepatic, styptic
CIMICIFUGA RACEMOSA NUTT.	rhizoma	Black cohosh	3	Treatment of menopausal symptoms, rheumatoid arthritis or osteoarthritis, chemopreventive. Treatment prostatic adenoma
CINCHONA CALISAYA WEDD.	cortex	Jesuit's Powder, Yellow Cinchona, Calisaya, Ledger quinine	3	Antimalaric, antipyretic, tonic and astringent, valuable for influenza, neuralgia and debility. Toxicity.
CINCHONA CORDIFOLIA MUT.	cortex	Colombian tree, Cartagena bark	3	Anti-parasitic, antimalarial, bitter digestive, anticramping, antimicrobial, neuroprotective, MAO inhibitor. Toxicity
CINCHONA LANCIFOLIA MUT.	cortex	Cinchona bark	3	Anti-parasitic, antimalarial, bitter digestive, anticramping, antimicrobial, neuroprotective, MAO inhibitor. Toxicity

CINCHONA LEDGERIANA MOENS-T.	cortex		3	Anti-parasitic, antimalarial, bitter digestive, anticramping, antimicrobial, neuroprotective, MAO inhibitor. Toxicity
CINCHONA MICRANTHA E.ET P.	cortex		3	Anti-parasitic, antimalarial, bitter digestive, anticramping, antimicrobial, neuroprotective, MAO inhibitor. Toxicity
CINCHONA NITIDA R.ET P.	cortex		3	Anti-parasitic, antimalarial, bitter digestive, anticramping, antimicrobial, neuroprotective, MAO inhibitor. Toxicity
CINCHONA OFFICINALIS L.	cortex		3	Anti-parasitic, antimalarial, bitter digestive, anticramping, antimicrobial, neuroprotective, MAO inhibitor. Toxicity
CINCHONA PERUVIANA HOW.	cortex	Cinchona bark, Red Bark, Peruvian bark	3	Febrifuge, tonic, astringent, valuable for influenza, neuralgia and debility
CINCHONA PITAYENSIS WEDD.	cortex		3	Anti-parasitic, antimalarial, bitter digestive, anticramping, antimicrobial, neuroprotective, MAO inhibitor. Toxicity
CINCHONA SUCCIRUBRA PAV.	cortex		3	Anti-parasitic, antimalarial, bitter digestive, anticramping, antimicrobial, neuroprotective, MAO inhibitor. Toxicity
CINNAMOMUM ZEYLANICUM		Ceylon cinnamon, true cinnamon	3	Antidiabetic, antioxidant, antimicrobial, antifungal
CIRSIUM ARVENSE SCOP.	herba	Canada thistle, California Thistle, Corn Thistle, Creeping Thistle, Cursed Thistle, Green Thistle, Hard Thistle, Perennial Thistle, Prickly Thistle, Small-flowered or White Thistle	1	Flatulence
CISSUS ALATA JACQ.	herba, folium	Cissus rhombifolia	0	
CISTUS INCANUS L.	resina, radix	Pink Rockrose, hairy rockrose	2	Gastroprotective, antileishmanial, antibacterial, antifungal

CISTUS LADANIFERUS L.	gummi	Gum rockrose, crimson spot rockrose	2	Antibacterial, anabolic effects
CISTUS MONSPELIENSIS L.	gummi	Montpelier cistus, Montpellier rock-rose	2	Antioxidant, photoprotection for skin, leishmanicidal, spasmolytic on intestinal and vascular smooth muscle
CITRUS AURANTIUM		Bitter Orange, Citrus bigarradia, Citrus vulgaris	3	Weight loss, anxiolytic, anti-inflammatory, antioxidant, inhibitory activity on rotavirus infection
CITRUS LIMONUM		Lemon	2	Antioxidants, anticancer, anti-inflammatory properties, anti-fertility effect
CLADONIA COCCIFERA SCHAEER	thallus	Fruticose lichen, cup lichen, Red pixie cup	1	
CLADONIA PYXIDATA FR.	thallus	Pixie Cup lichen	1	
CLADONIA RANGIFERINA WEB.	thallus	Reindeer lichen, Reindeer moss, Caribou moss	2	Antimitotic
CLITORIA TERNATEA L.	radix, semen	Asian pigeonwings, Butterfly Pea	2	Anti-inflammatory, analgesic, antipyretic properties, nootropic, anxiolytic, antidepressant, anticonvulsant and antistress activity
CLOROFILLA		Chlorophyll	2	Traumatology, gynecology
CNICUS BENEDICTUS L.	folium, fructus, herba c. floribus, summitas	Blessed thistle, Bitter Thistle, Carbenia Benedicta, Holy Ghost Herb, Spotted Thistle, St. Benedict's Thistle	1	Appetite enhancer (it is approved by the German E Commission). The whole plant is astringent, bitter, cholagogue, diaphoretic, diuretic, strongly emetic in large doses, emmenagogue, galactagogue, stimulant, stomachic and tonic. The treatment often caused nausea and vomiting.
COCHLEARIA OFFICINALIS L.	folium, herba c. floribus	Common Scurvy Grass	1	The herb is antiscorbutic, aperients (mild laxative), disinfectant, diuretic and stimulant
COCOS NUCIFERA L	oleum	Coconut tree, Coconut palm	3	Antinociceptive, free radical scavenger, antioxidant, anticancer, lipid lowering activity

CODONOPSIS PILOSULA NANNFELD	flos, herba	Dang shen or poor man's ginseng, Campanumoea pilosula	3	Improving the cognitive function and overall health (adaptogen), gastroprotective (ulcers), anticancer, antioxidant, antimicrobial, immunomodulatory
COLA ACUMINATA SCHOTT ET END.	semen	Cola Nut, Abata cola	2	Anti-trypanosomal, stimulate gastric acid secretion, hypoglycemic
COLA NITIDA SCHOTT ET ENDL.	semen	Cola vera	2	Anti-adhesion of Helicobacter pylori to human stomach, anti-mycobacterial activities, anxiolytic and/or antidepressant, phyto-anti-oestrogens, antileishmanial
COLEUS FORSKOLII		Forskolin	2	cAMP stimulator, vaso-relaxing effect, reduced whole blood platelet aggregation and ATP release, important for modulating receptor sensitivity
COLLINSONIA CANADENSIS L.	radix	Canada Horsebalm, Richweed, Hardhack, Heal-All, Horseweed, Ox-Balm and Stone root.	1	Stimulates the stomach, tonic, heart tonic. It has a direct influence upon atonic and dilated or otherwise impaired conditions of the veins and arteries. Antioxidants in the lipid peroxidation
COMBRETUM MICRANTHUM DON.	folium	Kinkeliba	2	Antioxidant, microbicide and microbiostatic, anti-inflammatory, antiviral (herpes simplex)
COMBRETUM SUNDAICUM MIQ.	folium, herba	Jungle weed	1	
COMMEUNA TUBEROSA L.	herba		0	
COMMIPHORA ABYSSINICA ENGL.	resina, gummi	Commiphora habessinica	0	
COMMIPHORA AFRICANA ENGL.	gummi	African bdellium, hairy corkwood. Balsamodendrum africanum, myrrh	1	
COMMIPHORA MUKUL HOOK	gummi	Commiphora wightii, Guggul or Mukul myrrh tree	3	Hypolipidemic, treatment of hypercholesterolemia, anti-inflammatory, ameliorates hypothyroidism, against oxidative stress and hyperproliferative response of UVB radiations, prevent atherosclerosis, antibacterial

COMMIPHORA MYRRHA ENGL.	gummi	Myrrh tree, Myrrh gum, Commiphora molmol	2	Anti-inflammatory, antimicrobial, use in cosmetic products for irritated, reactive and/or senescent epidermis, antihyperglycemic
COMMIPHORA OPOBALSAMUM ENGL.	gummi, resina, lignum, fructus	Balsam of Gilead, Balsamum Gileadense, Balsamodendrum Opobalsamum, Amyris Opobalsamum	2	Hypotensive, antiproliferative effects on human prostate cancer cell, ulcer protective, hepatoprotective, antioxidant
COMMIPHORA SCHIMPERI ENGL.	gummi	Glossy-leaved corkwood, Glossy-Leaf Myrrh, Commiphora betschuanica	0	
COMMIPHORA MOLMOL ENGL.	gummi	Myrrh gum, Commiphora myrrha	2	Antischistosomal, immunomodulatory, anti-inflammatory, antithrombotic, anticarcinogenic, gastric antiulcer
CONVOLVULUS ARVENSIS L.	herba		2	Antiasthmatic, antimicrobial, anticonvulsive activity, anticancer agent
CONVOLVULUS SCOPARIUS L.	lignum,radix	Lignum rhodium, rhodium-wood	0	
CONYZA CANADENSIS CRONQ.	herba, summitas	Canadian horseweed, Canada Fleabane, Erigeron canadensis	2	Antibacterial, antiaggregatory and antioxidative activities
COPAIFERA GUYANENSIS DESF.	balsamum	Copaiba	0	
COPAIFERA LANGSDORFII DESF.	balsamum	Copaiba	2	Anti-inflammatory, muscle relaxant, analgesic (pain-reliever), antibacterial, anticancerous, antifungal, antiulcerous, gastroprotective, wound healer. May cause a measles-like rash in those allergic to the resin.
COPAIFERA OFFICINALIS L.	balsamum	Copaiba	1	Stimulant, cathartic and diuretic, diminishing excessive secretions. In large doses, Copaiba is an irritant.

COPTIS JAPONICA MAK.	radix	Coptis anemonaefolia, Coptis orientalis, Thalictrum japonicum	2	Antihypertensive, induce apoptotic anticancer effect, antifungal, antimalarial activity, inhibitory effect on catecholamine biosynthesis
COPTIS TEETA WALL.	rhizoma	Hung-Ling, Yun Lian, Coptis teetoides	2	Anti-diarrheal properties, antimalarial effect
COPTIS TRIFOLIA SALISB.	herba	Threeleaf goldthread, Goldthread, Coptis groenlandica	1	Antibacterial, antiphlogistic, highly astringent, sedative, stomachic, tonic
CORALLINA OFFICINALIS L.	thallus	Coral weed	2	Antioxidant, hypolipidaemic activity, antimicrobial, anthelmintic activities, calcification inhibitor
CORDIA MYXA L.	fructus	Assyrian plum, Lasura	2	Antioxidant and anti-inflammatory effects
CORNUS FLORIDA L.	cortex ex radicibus	Flowering Dogwood, American Dogwood, Cornelian Tree, False Box, False Boxwood, Florida Dogwood, Indian Arrowwood, Nature's Mistake or White Cornel, Benthamia florida	1	Anthelmintic, astringent, bitter, stimulant, tonic
CORNUS SANGUINEA		Common Dogwood, Swida sanguinea	1	Astringent, emetic, febrifuge
CORONOPUS SQUAMATUS ASCHERS.	herba	Crowfoot, Cochlearia coronopus, Coronopus procumbens, Coronopus ruellii, Senebiera coronopus	1	
CORRIGIOLA TELEPHIIFOLIA POURR.	radix	Corrigiola litoralis, strapwort, false pellitory root	1	
CORYLUS AVELLANA		Common Hazel	2	Favorable changes in plasma lipid profiles of hypercholesterolemic adult, antioxidant
COSCINIUM FENESTRATUM COLIBR.	rhizoma	Columbo wood	2	Hypotensive and vasorelaxant effects, antioxidant, antibacterial, antiplasmodial activity. Neurotoxicity

COSTUS SPECIOSUS SM.	radix	Crape ginger, canereed, Malay ginger, spiral flag, wild ginger	2	Antibacterial activity, smooth muscle relaxant, hypotensive and bradycardiac activity, antispasmodic, estrogen-like activity
COTINUS COGGYGRIA SCOP.	cortex	Smoketree	2	Antioxidants, antiviral and antibacterial activities, capillary blood circulation.
CRAMBE MARITIMA L.	folium, fructus	Sea kale	0	
CRATAEGUS AZAROLUS L.	folium	Azarole, Crataegus aronia	2	Inotropic and diuretic actions for the treatment of congestive heart failure,
CRATAEGUS CURVISEPALA LIND.	flos, folium	Crataegus rhipidophylla, English hawthorn	3	Antihypertensive
CRATAEGUS LAEVIGATA DC	flos, folium	Midland hawthorn, Woodland hawthorn or mayflower	3	Antioxidant, hypotensive
CRATAEGUS MONOGYNA JACQ.	flos, folium	Hawthorn	3	ACE inhibitory activity, vasorelaxation, cardiovascular protective, the treatment of left ventricular dysfunction, cardiac insufficiency, angina and arrhythmia, anti-inflammatory action in-vivo by reducing the edema, antioxidant
CRATAEGUS NIGRA WALD. ET KIT.	flos, flos c. foliis, folium	Hungarian Hawthorn	1	Cardiotonic, hypotensive.
CRATAEGUS OXYACANTHA MEDICUS	flos, folium	Hawthorn	3	Hypolipidemic, antioxidant, anti-arrhythmic, cardioprotective, ACE-inhibition, radical scavenger
CRATAEGUS PENTAGYNA W. ET K.	flos, flos c. foliis, folium	Crataegus melanocarpa	1	Cardiotonic, hypotensive.
CRESCENTIA CUJETE L.	fructus	Calabash tree, gourd tree	2	Antimicrobial, antifungal, anti-hypertensive
CRITHMUM MARITIMUM L.	herba	Samphire	2	Antibacterial, antioxidant
CROCUS SATIVUS		Saffron	3	Treatment of mild to moderate depression, anticancer, antioxidant, antinociceptive, anti-inflammatory, anticonvulsant, radical scavenger, antitussive

CROTON ELUTERIA SW.	cortex, folium	Cascarilla, cascarilha, amber kabug, sweet bark, sweet wood bark	2	Digestive (increase histamine-induced gastric acid secretion), NF-kB inhibiting properties
CUMINUM CYMINUM		Cuminum odorum, Cumin	2	Chemopreventive, inhibition of LDL oxidation, inhibit platelet aggregation, antibacterial, galactagogue.
CUPRESSUS SEMPERVIRENS L.	conus, lignum, folium	Mediterranean Cypress, Italian cypress	2	Antiplatelet activity, antimutagenic
CURCUMA LONGA L	rhizoma	Turmeric	3	Neuroprotective for cerebral ischemia, controlling allergic responses, antioxidant, anti-inflammatory, antiviral, antibacterial, antifungal properties, with potential activity against cancer, diabetes, arthritis, Alzheimer's disease and other chronic maladies, treatment of hyperlipidemia, antidepressant
CURCUMA XANTHORRHIZA ROXB.	rhizoma	Curcuma zedoaria, curcuma javanica, Javanese turmeric. Tumulawak, Java turmeric, temu lawak, gedè, Indian saffron, Jiang huang, Haridra.	3	Chemopreventive, anticandidal activity, treatment of Alzheimer's disease- and other neurol. disease-related ROS and inflammation, hepatoprotective, osteoarthritis
CURCUMA ZEDOARIA ROSC.	rhizoma	Zedoary, Zeodary root, white turmeric	2	Anti-inflammatory, antimicrobial, chemopreventive, antioxidant, antifertility activity
CUSCUTA EPITHYMUM L.	herba	Cuscuta trifolii, dodder	0	
CUSCUTA EUROPAEA L.	herba	Greater dodder	2	Immunomodulatory properties
CUSPARIA OFFICINALIS HANC.	cortex	Cusparia febrifuga, Galipea cusparia, Galipea officinalis, angostura	2	Antimalarial activity, antitubercular
CUSPARIA TRIFOLIATA ENG.	cortex	Angostura trifoliata	0	

CYAMOPSIS TETRAGONOLOBUS		Cyamopsis psoralioides, guar bean, cluster bean	2	Bacterial anti-adhesive, nutraceutical (animal or human food), improved pharmaceutical excipient, therapy for hypercholesterolemia, hyperglycemia and obesity, modifying postprandial hyperglycemia in diabetics, anticoagulant
CYCLANTHERA PEDATA		Caygua, Caigua, caihua, cayua, achocha, slipper gourd, lady's slipper, sparrow gourd, stuffing cucumber, korila, Momordica pedata	1	Antioxidant
CYMBOPOGON CITRATUS STAPF.	herba, folium, rhizoma, summitas	Lemongrass	2	Antidiarrhoeal, antifungal, antifungal activity against dermatophytes (skin), in the combat of vaginal infections, mosquito repeller
CYMBOPOGON FLEXUOSUS STAPF.	herba, summitas	East Indian Lemongrass	2	Antibacterial, antimycotic activity, antifungal
CYMBOPOGON LANIGER PERR.	herba		0	
CYMBOPOGON MARTINI WATS	herba	Palmarosa	2	Antibacterial, anthelmintic, anti-inflammatory
CYMBOPOGON NARDUS RENDL.	herba, oleum, summitas	Citronella grass	2	Antimicrobial, antifungal, acaricidal.
CYMBOPOGON SCHOENANTHUS SP. VAR. MOTIA	herba		2	Antioxidant and antiradical
CYMBOPOGON WINTERIANUS JOW.	herba, oleum	Cymbopogon grass	2	Antibacterial, antifungal
CYNARA CARDUNCULUS L.	capitula	Cardoon	2	Antioxidant, antimutagenic and therapeutic anticancer enhancing, neurodegenerative diseases.
CYNARA SCOLYMUS L.	folium	Globe artichoke	3	Choleretic, hepatoprotective, dyspepsia, antifungal, hypolipidaemic, antioxidant for intestinal health, antibacterial effect against Helicobacter pylori, antispasmodic

CYNODON DACTYLON PERS.	rhizoma	Bermuda Grass	2	Diuretic, antimicrobial, hypoglycemic
CYPERUS LONGUS L.	radix	Galingale	2	Hepatoprotective, antioxidant
CYPERUS ROTUNDUS L.	radix	Cyperus hexastachyos, Pycnus rotundus, Nut Grass	2	Hypocaloric diets, hypoglycemic, antidiarrhoeal activity, anti-Candida activity, antioxidant and antimutagenic activities, antimalarial, anti-inflammatory, anticariogenic (<i>Streptococcus mutans</i>).
CYPRIPEDIUM PUBESCENS WILLD.	rhizoma, radix	Large Yellow Lady's Slipper, American valerian, Moccasin Flower, Nerveroot, Noah's ark, Yellow Indian Shoe	0	
CYTINUS HYPOCISTIS L.	succus inspissatus	Cytinus hypocistus	2	Anticancer
DACTYLIS GLOMERATA L.	fructus, herba, summitas	Orchardgrass, Cocksfoot	2	Improvement of allergic inflammation through the reduction of inflammatory mediator production by human lymphocytes, grass pollen immunotherapy
DACTYLOPIUS COCCUS COSTA	insectus foemina	Cochineal, carmine	1	
DAEMONOROPS DRACO BLUME		Dragon's Blood, Calamus draco	1	
DAEMONOROPS PROPINQUUS BECC.	fructus, resina	Malay dragon's blood	0	
DANAIS FRAGRANS COMMERS	resina		1	
DAUCUS CAROTA	cortex ex radicibus, cortex arboris	Queen Anne's lace, wild carrot	3	Antioxidant, antibacterial, antifungal, hypotensive (direct cardiac depressant action), relaxant effect on muscles, anti- steroidogenic, cognitive dysfunctions, antispasmodic
DAVILLA RUGOSA POIR.	folium		2	Antioxidant, stimulant and anxiolytic, antiulcer effect

DESCURAINIA SOPHIA WEBB.	semen, herba	Flixweed, herb Sophia, Sisymbrium sophia	1	Antiasthmatic, antiscorbutic, antitussive, cardiotonic, diuretic, febrifuge, laxative, vermifuge
DESMODIUM ADSCENDENS		Amor Seco, strongback, tick clover, tick trefoil, tropical clover, zarzabacoa galana	2	Analgesic, antipyretic, antiallergic, anti- anaphylactic
DIANTHUS CARYOPHYLLUS L.	flos	Carnation	2	Antioxidant, antiviral
DICENTRA CANADENSIS WALD.	tuber	Squirrel Corn, Corydalis canadensis	1	Tonic, diuretic, skin diseases
DICENTRA CUCULLARIA BERNH.	tuber	Dutchman's Breeches	1	Tonic, diuretic, skin diseases
DICYPELLIUM CARYOPHYLLATUM N.	cortex, lignum	Clove bark	1	
DIOSCOREA COMPOSITA HEMSL.	rhizoma	Yam	1	Natural hormonal supplement for women
DIOSCOREA VILLOSA L.	rhizoma	Wild yam	2	Cytotoxic, antifungal activity, angiogenesis promotion in osteoblasts, cosmetic skin
DIOTIS CANDIDISSIMA DESF.	herba	Otanthus maritimus, Diotis maritima, sea cudweed	1	Insecticidal
DILOTAXIS TENUIFOLIA DC	herba	Sand Rocket, sand mustard, Lincoln weed, perennial wallrocket, Brassica tenuifolia, Sisymbrium tenuifolium	2	Antioxidant
DIPSACUS FULLONUM L.	radix	Fuller's Teasel	1	Cure of lyme disease, antibiotic, improved circulation, cure for warts, eyewash
DIPTEROCARPUS ALATUS ROXB.	balsamum	Hairy-leaf apitong	1	
DOREMA AMMONIACUM D. DON.	gummi, resina	Ammoniacum	2	Antioxidant, antimicrobial
DORONICUM PARDALIANCHES L.	herba, radix	Great false leopardbane, Doronicum cordatum	1	The root is cardiotonic, antidepressive

DORONICUM PLANTAGINEUM L.	herba, radix		0	
DORSTENIA CONTRAJERVA L.	radix	Contrayerva, tusilla	2	Anti-HIV, leishmanicidal, antiprotozoal
DRACAENA DRACO L.	resina cort.	Canary Islands Dragon Tree or Drago	1	
DRACOCEPHALUM MOLDAVICA L.	herba c. floribus	Moldavian dragonhead, Moldavian Balm	2	Antioxidant, antimicrobial
DRACUNCULUS VULGARIS SCHOTT.	rhizoma	Black Dragon, Dragonwort, Dragon Lily, Voodoo Lily, Viagra Lily, common dracunculus	1	
DRIMYS WINTERI FORST.	cortex arboris	Winter's Bark, Drimys aromatica, Wintera aromatica	2	Antiulcer, analgesic, anti-inflammatory, antiallergic
DROSERANGLICA HUDSON	herba	English sundew	1	
DROSERAINTERMEDIA HAYNE	herba	Oblong-leaved sundew or spoonleaf sundew	0	
DROSERAPELTATA SM.	herba	Sundew	2	Antimicrobial, treatment of oral infectious diseases like dental caries and periodontitis
DROSERARAMENTACEA BURCH	herba		2	Against bronchospasm
DROSERAROTUNDIFOLIA L.	herba c. floribus	Common sundew or round-leaved sundew	2	Anti-inflammatory, antispasmodic
DYSOXYLUM LOUREIRI PIERRE	oleum		0	
ECHINACEA ANGUSTIFOLIA DC .	herba, radix	Blacksamson echinacea	3	Immunostimulant, treatment of upper respiratory tract infections
ECHINACEA PALLIDA BRITTON	radix	Pale purple coneflower	3	Antioxidant, immunostimulant, topic anti-inflammatory and cicatrizing activity, hepatoprotective,

ECHINACEA PURPUREA MOENCH.	herba, radix	Eastern purple coneflower, Brauneria purpurea	3	Immunomodulatory activity, prophylaxis, and treatment of common cold, prolactin secretion, antiandrogenic
ECHIUM PLANTAGINEUM	oleum	Purple Viper's Bugloss, Paterson's Curse, Salvation Jane	1	
ELEUTHEROCOCCUS SENTICOSUS MAXIM.	radix	Eleuthero, Siberian Ginseng	3	Self well-being, vasorelaxant, treatment of patients with acute non-specific pneumonia, adaptogen, antiviral, immunostimulant, hypoglycemic
ELYMUS REPENS GOULD.	rhizoma	Quackgrass, Couch Grass	1	
EPILOBIUM ANGUSTIFOLIUM L.	herba	Fireweed, Rosebay Willowherb	2	Antioxidant, cytotoxicity, prostate diseases, anti-inflammatory, analgesic
EPILOBIUM PARVIFLORUM	herba	Codlins And Cream, willow herb	2	Prostate disorders, anti-inflammatory and antioxidant
EQUISETUM ARVENSE L.	herba	Field horsetail	2	Antioxidant, anticonvulsant and sedative, cognitive enhancement, apoptosis in tumorigenesis, antimicrobial, hepatoprotective, anti-elastase activity (improved cutaneous rugosity and elasticity)
EQUISETUM FLUVIATILE L.	herba	Water horsetail	2	Diuretic
EQUISETUM HYEMALE L.	herba	Scouringrush horsetail, Common Scouring Rush, Rough Scouring Rush, Bottlebrush	1	
EQUISETUM MAXIMUM		Equisetum telmateia, giant horsetail	1	Astringent, diuretic
EQUISETUM TELMATEJA EHRH.	herba	Great horsetail	2	Antioxidant
ERICA CINEREA L.	flos, rami c. floribus	Bell Heather, or heather-bell, Scotch heath	1	

ERIODICTYON CALIFORNICUM TOR.	herba, folium, summitas	California yerba santa, Yerba Santa, Mountain Balm, Consumptive's Weed and Bear Weed	2	Chemopreventive, antibacterial, bitter masking.
ERODIUM CICUTARIUM L 'HÉRIT.	herba, radix, summitas	Redstem stork's bill	2	Interferonogenic and antiviral
ERODIUM MOSCHATUM L 'HÉRIT.	herba	Musk Storksbill	1	Astringent, febrifuge
ERYNGIUM CAMPESTRE L.	herba, radix	Field eryngo	2	Anti-inflammatory and antinociceptive
ERYNGIUM PRAELATUM A. GRAY	radix	Eryngium aquaticum	0	
ERYTHRAEA CENTAURIUM	herba c. floribus, summitas	Centaury, Centaurium minus, Centaurium umbellatum, Erythraea centaurium	2	Antioxidant, antibacterial, anti-dyspeptic, hepatoprotective, anti-inflammatory, antipyretic
ERYTHRAEA CHILENSIS PERS.	herba c. floribus	Centaurium chilense, Centaurium cachanlahuen	1	
ERYTHRAEA SPICATA PERS.	herba c. floribus	Centaurium spicatum	2	Reduces blood pressure
ESCHSCHOLTZIA CALIFORNICA CH.	herba	California Poppy	2	Peripheral analgesic effects
EUCALYPTUS CITRIODORA HOOK	cortex, flos, folium, lignum, oleum	Lemon Scented Gum, Corymbia citriodora, spotted gum, lemon eucalyptus	3	Antimicrobial, anticandidial, antifungal, analgesic and anti-inflammatory, nematocidal
EUCALYPTUS GLOBULUS LABILL.	flos, fructus, folium, lignum, oleum	Tasmanian Blue Gum, Southern Blue Gum or Blue Gum Eucalyptus	3	Treatment of respiratory tract infection, antibacterial, antioxidant, antihyperglycemic, inhibitors of skin-tumor promotion, against the zoonotic scabies
EUCALYPTUS ODORATA B. ET SCH.	folium, lignum	Peppermint box, Eucalyptus porosa	0	
EUCALYPTUS SMITHII BAKER	folium, lignum	Gully gum, gully peppermint	1	
EUCARYA SPICATA SPRAGUE-SUM.	lignum, oleum	Santalum spicatum, Australian sandalwood	0	

EUCHEUMA HORRIDUM AGARCH.	thallus		0	
EUCHEUMA SPICIFORME AGARDH.	thallus		0	
EUCHEUMA SPINOSUM AGARDH.	thallus		1	
EUGENIA CHEQUEN MOL.	herba, folium	Luma chequen, Myrtus chequen, Eugenia gayana, Myrtus gayana, Luma gayana.	2	Fungistatic
EUGENIA UNIFLORA L.	cortex, flos, folium	Surinam Cherry, Pitanga	2	Antioxidant, antihypertensive, trypanocidal, hypoglycemic, hypotriglyceridemic, antibacterial, antifungal against dermatophytes
EUPHORIA LONGANA LAM.	semen	Longan	2	Analgesic, hypotensive.
EUPHRASIA OFFICINALIS L.S.L.	herba c. floribus	Eyebright, Euphrasia rostkoviana	2	Treatment of ocular allergy, antioxidant, antimycotic
EUPHRASIA STRICTA D. WOLF.	herba c. floribus	Drug eyebright	0	
EVERNIA PRUNASTRI ACH.	thallus	Oakmoss lichen	2	Antifungal, antioxidant
EXOSTEMA CARIBAEUM SCHULT.	cortex	Caribbean princewood	1	Anemia, febrifuge, stomachache, diarrhea, hemorrhoids, vermifuge in children, stimulate appetite
EXOSTEMA FLORIBUNDUM ROEM-S.	cortex	Exostema vigueta	0	
FABIANA IMBRICATA R. ET P.	cortex, folium, herba, lignum	Pichi	2	Gastroprotective
FAGUS SYLVATICA L.	pix, fructus, lignum, semen	European beech	1	The tar is stimulating and antiseptic, used internally as a stimulating expectorant in chronic bronchitis, or externally as an application in various skin diseases
FERULA ASSA FOETIDA L.	gummi, radix	Asafoetida	2	Antimicrobial, spasmolytic, chemopreventive

FERULA GALBANIFLUA BOISS-B.	gummi, resina	Ferula gummosa, galbanum	1	Antispasmodic, carminative, expectorant, stimulant
FERULA NARTHEX BOISS	gummi, resina	Ferula jaeschkeana, Devils dung	2	Antioxidant
FERULA PERSICA WILLD.	gummi, resina		2	Antibacterial, anticancer, antifungal
FERULA SUMBUL HOOK F.	radix	Ferula moschata, Musk Root	2	Anti-HIV activity
FICUS ANTHELMINTHICA MART.	latex	Ficus insipida	2	Vermicide, anthelmintic
FICUS BENGHALENSIS L.	cortex, fructus, latex	Bengal fig, Indian fig, East Indian fig, Indian Banyan or Banyan	2	Hypoglycemic, antibacterial
FICUS CARICA L.	folium, gemma, latex	Fig tree, Common Fig	2	LEAFS: anti-inflammatory, hypotriglyceridaemic, antioxidant. LATEX: treatment of common warts (Verruca vulgaris), hemostatic, anthelmintic. FRUIT: Antioxidant
FICUS CYSTOPODA MIQ.	cortex arboris	Pseudolmedia macrophylla, Pseudolmedia murure, Urostigma cystopodum	0	
FICUS ELASTICA ROXB.	latex	Rubber fig, rubber tree, rubber plant, or Indian rubber tree	2	Anti-inflammatory
FICUS RELIGIOSA L.	cortex, folium, resina, semen	Bo tree, sacred fig	2	Improvement of cognition, antimicrobial
FILIPENDULA ULMARIA MAX.	flos, folium, herba, radix, summitas	Meadowsweet, Spiraea ulmaria, Ulmaria pentapetala	2	Anti-inflammatory, antioxidant
FILIPENDULA VULGARIS MOENCH.	radix	Dropwort, Filipendula hexapetala, Spiraea filipendula, Ulmaria filipendula	1	Anthelmintic, antispasmodic, lithontripic

FOMES FOMENTARIUS FR.	carpophorum	Ungulina fomentaria or Polyporus fomentarius, touchwood, punk, hoof fungus	2	Antioxidant, hypoglycemic, anti-inflammatory, antiviral
FOMES IGNARIUS L.	carpophorum	Phellinus igiarius	0	
FRAXINUS EXCELSIOR IUS L.	cortex, folium	Common ash, Weeping Ash	2	Anti-inflammatory, antioxidative, hypoglycemic
FRAXINUS ORNUS L.	folium	Flowering Ash or Manna Ash	2	Antioxidant, antimicrobial, possible application as a sunscreen
FUCUS SERRATUS L.	thallus	Toothed wrack or serrated wrack	2	Antioxidant, antithrombin, anti-inflammatory, antitumoral
FUCUS VESICULOSUS L.	thallus	Bladder wrack, rockweed, bladder Fucus, sea oak, black tany, cut weed	2	Hypolipidemic, hypoglycemic, mucosa bioadhesive, anti-genotoxic, antioxidants, anti-aging activities useful for cosmetics, anti-HIV, anticoagulant
FUMARIA OFFICINALIS L.	folium, herba c. floribus, summitas	Fumitory	2	Antispasmodic, aperient, cholagogue, diaphoretic, diuretic, laxative, tonic
GALEGA OFFICINALIS L	folium, herba c. floribus	French honeysuckle, Goat's Rue, French Lilac, Italian Fitch or Professor-weed	2	Antioxidant, anti-platelet, weight-reducing, hypoglycemic, anti-bacterial,
GALEOPSIS SEGETUM NECKER	herba c. floribus, summitas	Downy Hemp Nettle, Galeopsis dubia, Galeopsis ochroleuca	2	Flowering plant is astringent, diuretic and mildly expectorant
GALIUM APARINE L.	flos, herba c. floribus	Cleavers, Clivers, Goosegrass, Stickywilly, Stickyweed, Catchweed, and Coachweed	2	Antioxidant
GALIUM CRUCIATA SCOP	flos, herba c. floribus	Cruciata laevipes, Crosswort	1	Antirheumatic, appetizer, vulnerary

GALIUM MOLLUGO L.	summitas	Wild Madder, White Bedstraw, Hedge Bedstraw, False baby's breath, Galium elatum, Galium erectum	1	Antispasmodic, lithontripic, vulnerary
GALIUM ODORATUM SCOP.	folium, herba c. floribus	Sweet Woodruff, Asperula odorata	2	Antioxidant, antimicrobial
GALIUM VERUM L.	flos, herba c. floribus, summitas	Lady's Bedstraw	2	Antioxidant, sedative properties
GARCINIA CAMBOGIA		Garcinia gummi-gutta, Gambooge, Brindleberry, Brindall berry or Malabar tamarind	3	Weight-reducing agent, anti-adipogenic, hypoglycemic, gastroprotective, antiulcer, hypolipidemic,
GARDENIA JASMINOIDES ELLIS	flos, fructus, radix	Common Gardenia, Cape Jasmine	2	Therapeutic agent for the ulcerative colitis, and for ischemia in patients, antiangiogenic activity (fruit), hepatoprotective, antiatherosclerosis, hypolipidemic effect by inhibiting pancreatic lipase, leading to the malabsorption of fat and cholesterol
GARRYA RACEMOSA RAMIREZ	cortex, folium	Garrya laurifolia ssp. racemosa	0	
GAULTHERIA PROCUMBENS L.	herba, folium	Checkerberry, Gaultheria repens	1	Analgesic, anti-inflammatory, aromatic, astringent, carminative, diuretic, emmenagogue, stimulant, tonic
GERANIUM MACULATUM L.	herba, radix, rhizoma	Spotted geranium	2	Antimicrobial
GERANIUM PRATENSE L.	herba	Meadow Crane's Bill, meadow geranium	2	Free radical scavenger
GERANIUM ROBERTIANUM L.	herba c. floribus	Herb Robert	2	Antimicrobial and antiplasmod, hypoglycemic
GERANIUM ROTUNDIFOLIUM L.	herba	Roundleaf geranium	1	Astringent and diuretic
GERANIUM SANGUINEUM L.	herba	Bloody cranesbill	2	Antiviral, anti-influenza, antiherpes, antimicrobial
GEUM RIVALE L.	herba, radix	Water Avens, purple avens	2	Antimicrobial, anti-inflammatory.

GEUM URBANUM L.	herba, radix, summitas	Wood Avens, Cloverroot, herb bennet	2	Anti-inflammatory
GINKGO BILOBA L.	folium	Ginkgo, Maidenhair Tree	3	Treatment of cerebrovascular dysfunctions and peripheral vascular disorders, potent antioxidant, inhibitors of platelet activating factor, Alzheimer's disease, failing memory, age-related dementias, poor cerebral and ocular blood flow, congestive symptoms of premenstrual syndrome, prevention of altitude sickness, enhancement of female sexual function
GNAPHALIUM ULIGINOSUM A. RICH	herba	Marsh Cudweed, Filaginella uliginosa	1	Anti-inflammatory, aphrodisiac, astringent, diaphoretic, diuretic
GOSSYPIUM HERBACEUM L.	pilus, radix	Levant cotton, cotton plant	2	Anticancer
GRIFFONIA SIMPLICIFOLIA		Bandeiraea simplicifolia	0	
GRIFOLA FRONDOSA		Maitake, Hen of the Woods, Sheep's Head	3	Immunomodulator, anticancer, hypoglycemic, HIV therapy, treatment of hyperlipidemia, hypertension, hepatitis
GRIFOLA UMBELLATA PERS.	fungus	Polyporus umbellatus	2	Antitumoral
GRINDELIA CAMPORUM GREENE	herba c. floribus	Grindelia, Hardy Grindelia, Gum Plant, California Gum Plant, Scaly Grindelia, Rosin Weed	1	Relaxing, expectorant, antispasmodic, bradycardic action on the heart, hypotensive
GRINDELIA HUMILIS HOOK ET AR.	herba c. floribus	Hairy Gumweed	1	Antiasthmatic, expectorant, sedative, skin diseases
GRINDELIA ROBUSTA NUTT.	herba c. floribus	Great Valley Gumweed, Hardy Grindelia, Gum Plant, California Gum Plant, Scaly Grindelia, Rosin Weed	1	Antispasmodic, blood purifier, demulcent, expectorant, sedative, stomachic
GRINDELIA SQUARROSA DUN.	herba c. floribus	Curlycup gumweed, Rosin Weed	1	Antispasmodic, expectorant, sedative

GUAJACUM OFFICINALE L.	resina, lignum	Lignum vitae, guajacum, guaiac	2	Treatment of cardiovascular diseases, "nonspecific" spasmolytic activity
GUAJACUM SANCTUM L.	resina, lignum	Hollywood lignum-vitae, lignum-vitae, tree-of-life	0	
GUAZUMA ULMIFOLIA LAMK.	cortex, fructus	Mutamba, Bastard Cedar, Bastardcedar, West Indian Elm	2	Antiviral, antisecretory activity (cholera toxin-induced chloride secretion), antioxidant, hypoglycemic
GYMNEMA SYLVESTRE R. BR.	radix, folium, latex	Periploca of the woods, gudmar	3	Hypoglycemic, repair/regeneration of the endocrine pancreas
GYNOSTEMMA PENTAPHYLLUM		Jiaogulan	3	Hepatoprotective, treatment of inflammatory and cardiovascular diseases including atherosclerosis, anti-hyperlipidemic, scavenger of free radicals, hypoglycemic, gastroprotective (anti-gastric ulcer)
GYPSOPHILA PANICULATA L.	radix	Baby's breath	1	Spermicidal, contraceptive, purgative
GYPSOPHILA ROKEJEKA DEL.	radix		0	
HAMAMELIS VIRGINIANA L.	cortex, folium	American witchhazel	3	Antiviral, anti-inflammatory, skin topical treatment after chemical injury, periodontal prophylactics, complications of varicose veins and hemorrhoids, UVB erythema suppression
HAPLOPAPPUS BAYLAHUEN REMY	folium, herba	Baylahuen	2	Antioxidant
HARPAGOPHYTUM PROCUMBENS DC	radix	Grapple plant, wood spider, Devil's Claw	3	Anti-inflammatory and analgesic, alleviation of pain and improvement of mobility in a variety of musculoskeletal conditions, antioxidant, antiplasmodial (malaria), anticonvulsant, cardiovascular activity, hypotensive
HARUNGANA MADAGASCARIENSIS CH.	cortex, folium	Haronga	2	Antiplasmodial, antimicrobial, antiamoebic, spasmolytic activities
HEDEOMA PULEGIOIDES PERS	folium, oleum, herba c. floribus, summitas	American false pennyroyal	2	Antiviral

HEDERA HELIX L.	folium	Ivy, Common Ivy, English Ivy	3	Anthelmintic, treatment of chronic airway obstruction in children suffering from bronchial asthma, anti-inflammatory
HEDYCHIUM CORONARIUM KOENIG	flos	White ginger, white garland-lily	2	Anti-inflammatory, analgesic, antimicrobial, diuretic, antihypertensive
HELIANTHUS ANNUUS L.	folium, ligula	Common sunflower	2	Antioxidant, antibacterial, antifungal, cytotoxicity against tumor cells
HELICHRYSUM ARENARIUM MOENCH.	herba c. floribus, summitas	Everlasting Flower, dwarf everlast	2	Antioxidant, antiradical, cholagogue, choloretic, hepatoprotective, microsomal lipid peroxidation
HELICHRYSUM ITALICUM DON.	herba c. floribus, summitas	Curry Plant, Helichrysum angustifolium	2	Antioxidant, anti-inflammatory, anti-allergic, choloretic and antimicrobial.
HELICHRYSUM STOECHAS MOENCH.	herba c. floribus, summitas	Shrubby Everlasting	2	Antibacterial, antioxidant
HERACLEUM SPHONDYLIUM L.	fructus, herba	Cow Parsnip	2	Anticandidal activity, antimicrobial
HERNIARIA GLABRA L.	herba c. floribus, summitas	Rupture Wort	2	Hypotensive
HERNIARIA HIRSUTA L.	herba c. floribus	Hairy Rupture Wort	2	Treatment of nephrolithiasis
HESPERIS MATRONALIS L.	herba c. floribus	Sweet Rocket, dames rocket	1	Diaphoretic, diuretic
HEVEA BRASILIENSIS MUELL. ARG.	latex	Caoutchouc tree, Pará rubber tree, rubber tree	1	
HIERACIUM MURORUM L.	herba	Wall hawkweed, french oder golden lungweed	1	
HIERACIUM PILOSELLA L.	herba	Mouse-Ear Hawkweed, Pilosella officinarum	2	Antioxidant, diuretic, anti-inflammatory and antiproliferative
HIEROCHLOE ODORATA WAHL.	herba	Hierochloe borealis, Holy Grass	2	Antioxidant
HYDRANGEA ARBORESCENS L.	rhizoma	Wild hydrangea, Seven Barks	0	
HYDROCOTYLE VULGARIS L.	herba	Marsh Pennywort	1	

HYGROPHILA AURICULATA HEINE	folium, radix, semen	Waterleaf	2	Hepatoprotective, antioxidant, hypoglycemic, cardiovascular and anti- inflammatory diseases
HYMENAEA COURBARIL L.	cortex, resina	Jatobá, Brazilian cherry	2	Anti-inflammatory, antioxidant, antiplasmodial
HYPERICUM PERFORATUM L.	flos, herba c. floribus, summitas	Common St. John's wort, Tipton's Weed or Klamath weed	3	Antidepressant, treatment for premenstrual syndrome, antiedematogenic, anti- inflammatory, antinociceptive.
HYPPOPHAE RHAMNOIDES		Sea Buckthorn, Hippophae rhamnoides	3	Radioprotection, immunomodulatory, protection against subchronic arsenic toxicity, antiulcerogenic, chemoprevention, improves the contractile function of stretched cardiac myocyte, anti-inflammatory, antioxidant
HYPTIS SUAVEOLENS POIT.	herba c. floribus	Pignut	2	Antioxidant, antimicrobial, anti- inflammatory, antinociceptive, antifungal
HYSSOPUS OFFICINALIS		Hyssop	2	Antifungal, antimicrobial, antiviral, hypoglycemic, myorelaxant
IMPATIENS NOLI-TANGERE L.	herba	Western touch-me-not, Jewelweed	1	
INDIGOFERA TINCTORIA L.	folium	True indigo	2	Hepatoprotective, antioxidant, antidyslipidemic, hypocholesterolemic
INULA CONYZA DC.	herba	Ploughman's Spikenard, Conyza squarrosa, Inula squarrosa, Inula vulgaris	1	Antiscrophulatic, emmenagogue, vulnerary
INULA HELENIUM L.	radix, rhizoma c. radicibus	Elecampane	2	Hypoglycemic, antimicrobial, acaricidal, antitumoral
ISATIS TINCTORIA L.	herba, succus	Woad, Isatis indigotica	2	Anti-inflammatory, anti-arthritic, antiallergic
JACARANDA CAROBA DC	flos, folium	Brazilian Caroba-tree, Carob-tree, caaroba, caroba	2	Anti-dyspeptic, relaxant effect on spontaneous ileum (to treat gastrointestinal disorders)

JATRORRHIZA PALMATA MIERS	radix	Jateorhiza palmata, Calumba, calumba root, kalumba, jateorhiza	2	Antifungal activity
JUGLANS CINEREA L.	cortex	White Walnut, butternut	2	Pronounced antifungal and antibacterial activity
JUGLANS REGIA L.	folium, pericarpum	Walnut	3	Antioxidant, chemopreventive, anticancer, diuretic, laxative, decreasing the level of triglyceride and increasing the level of HDL, inhibit LDL oxidation, antibacterial, increase the pH of saliva
JUMELLEA FRAGRANS SCHLTR.	folium	Angraecum fragrans, faham	1	
JUNIPERUS COMMUNIS L.	folium, lignum	Common Juniper	3	Antifungal activity against dermatophyte, antitubercular, hypoglycemic, antioxidant, anticancer
JUSTICIA PECTORALIS JACQ.	herba	Freshcut	2	Analgesic, anti-inflammatory
KAEMPFERIA GALANGA L.	rhizoma	Lesser Galangale, Sand ginger, Aromatic Ginger or Resurrection lily	2	Antioxidant, antifungal, antibacterial, vasorelaxant and hypotensive, anticancer, monoamine oxidase inhibitor, wound healing activity, anti-allergic activity
KHAYA SENEGALENSIS JUSS	cortex	African Mahogany, Benin Mahogany, Dry Zone Mahogany, or Senegal Mahogany	2	Anthelmintic, antiplasmodial, strong antisickling, antioxidant, antifungal, chemopreventive
KICKXIA SPURIA DUMORT.	herba c. floribus	Round-leaved Fluellen, roundleaf cancerwort	1	
KNAUTIA ARVENSIS COULT.	flos, folium	Field scabiosa, Scabiosa arvensis	2	Antifungal
KRAMERIA TRIANDRA RUIZ ET P.	radix	Ratanya, Rhatany, Krameria lappacea	2	Antioxidant/photoprotective, antitumoral, antimicrobial
LACCIFER LACCA KERR.	insectus	Indian lac insect, Coccus lacca	0	INSECT!!

LACHNANTHES TINCTORIA	radix	Gyrotheca capitata, Gyrotheca tinctoria, Wool Flower, Red Root, Paint Root, Spirit Weed	1	Tonic. NB The effects of overdoses are said to resemble those of poisoning by Belladonna and other solanaceous drugs
LAGENARIA SICERARIA STANDL.	semen	Bottle gourd, calabash	2	Hypolipidemic, antihepatotoxic, antioxidant
LAGERSTROEMIA SPECIOSA -BANABA		Giant Crape-myrtle, Queen's Crape-myrtle or Banabá Plant	2	Hypoglycemic, antioxidant, antiobesity
LAMINARIA DIGITATA LMX	stipitas	Oarweed	2	Anti-inflammatory, antiangiogenic, anticoagulant, and antiadhesive, stimulation of phagocytic activity
LAMIUM ALBUM L.	flos, herba c. floribus	White Deadnettle	3	Antioxidant, anti-arthritis
LAMINARIA CLOUSTONI LE JOLY	thallus	laminaria	1	Gastroprotective, antiulcerative, antiappetite
LAPSANA COMMUNIS L.	folium	Common nipplewort	1	
LARIX DECIDUA MILL.	resina	European Larch, Alpine Larch	2	Antioxidant, insecticidal and larvicidal, antimicrobial
LARREA MEXICANA MORIC.	resina,herba	Chaparral, Larrea tridentata, L.divaricata, L.glutinosa, creosote bush, greasewood, gobernadora, hediondilla	-1	Dangerous!
LASERPITIUM LATIFOLIUM L.	herba, radix	Laserwort	1	Stomachic, tonic
LASIOSPHAERIA GIGANTEA BATCH EX PERS.	carpophorum		0	
LAURUS NOBILIS L.	fructus, radix	Bay Laurel, True Laurel, Sweet Bay, Grecian Laurel, Laurel, or Bay Tree	2	Antiaggregant and antiapoptotic effects in human platelets, antioxidant, antileukemic, wound healing.
LAVANDULA INTERMEDIA LOISEL	summitas c. floribus, oleum	Lavandin	2	Antiparasitic, antibacterial, antifungal, antioxidant
LAVANDULA LATIFOLIA MEDIC.	summitas c. floribus, flos, herba	Spike Lavender, Lavandula spica, broadleaved lavender	2	Hypoglycemic, antiviral, antiparasitic, expectorant, anti-inflammatory, antimicrobial activity against Helicobacter

				pylori
LAVANDULA STOECHAS L.	summitas c. floribus, flos	French Lavender, Spanish Lavender, Stoechas Lavender, or Topped Lavender	2	Antibacterial, cytotoxic, antimicrobial, anticonvulsant, sedative, antispasmodic, hypoglycemic
LAVANDULA VERA DC	summitas c. floribus, oleum, flos	Lavandula angustifolia, L. spica, L. officinalis, English Lavender, True Lavender	1	Stimulant, carminative, painful local affections
LAWSONIA INERMIS L.	folium, pulvis ex folis	Henna or Hina	2	Antimicrobial, tuberculostatic activity, anti- inflammatory, analgesic, molluscicidal, antibacterial. Henna may cause severe side-effects in some cases: haemolytic anaemia
LEDUM PALUSTRE L.	herba	Marsh tea, wild rosemary, Marsh Labrador Tea, Northern Labrador Tea, Rhododendron tomentosum	2	Treatment of insect bites, acaricidal, insecticidal, 'pesticidal' and/or arthropod repellent properties
LEONOTIS NEPETIFOLIA AIT F.	folium, herba c. floribus	Lion's ear, Klip Dagga	2	Antioxidant, antibacterial
LEONURUS CARDIACA L.	folium, herba c. floribus	Common motherwort	2	Antioxidant, cardioprotective
LEPIDIUM CAMPESTRE R. BR.	semen, herba	Field pepperweed, Pepperwort	1	
LEPIDIUM LATIFOLIUM L.	herba	Dittander	2	Prostate hyperplasia, diuretic
LEPIDIUM MEYENII		Maca	3	Prostatic adenoma, spermatogenesis and sperm motility, cytoprotection, antioxidant, lipid and glucose metabolism, estrogenic activity, enhance female fertility, improved sexual desire

LEPTANDRA VIRGINICA NUTT.	rhizoma	Veronicastrum virginicum, Veronica Virginica, Veronica purpurea, Paederota Virginica, Eustachya purpurea and Eustachya alba. Black Root, culver's root.	0	
LEPTOSPERMUM CITRATUM CHALL.	summitas	Leptospermum petersonii, Lemon Tea tree	2	Antimicrobial activity on gastrointestinal microorganisms, nematocidal, antibacterial
LEPTOSPERMUM SCOPARIUM		Manuka, Tea tree, Leptospermum	2	Virucidal, antioxidant, spasmolytic, antimicrobial
LESPEDeza CAPITATA MICH.	folium, summitas	Roundhead lespedeza, Round headed bush clover	2	ACE-inhibitory, antitumoral, antinephrotoxic
LEUCANTHEMUM VULGARE LAM.	herba, capitula	Oxeye daisy, Chrysanthemum leucanthemum	1	Antispasmodic, antitussive, diaphoretic, diuretic, emmenagogue, tonic and vulnerary
LEVISTICUM OFFICINALE KOCH.	fructus, herba, radix, folium, rhizoma, latex	Garden lovage	2	Urinary antiseptic and anti-adhesion, antioxidant
LIMONIUM VULGARE MILLER .	radix, flos	Common Sea-lavender, Statice limonium	0	
LINARIA VULGARIS MILL.	herba c. floribus	Butter and eggs, Yellow Toadflax	1	Antiphlogistic, astringent, cathartic, detergent, depurative, diuretic, hepatic, ophthalmic, purgative
LINUM CATHARTICUM L.	herba	Purging Flax	1	Anthelmintic, diuretic, emetic and purgative. Poisonous in large doses
LINUM USITATISSIMUM L.	oleum,placenta seminis	Common flax, Linseed	2	Prophylactic action for induced oxidative stress
LIPPIA CITRIODORA KUNTH	flos, folium	Lemon Verbena, Aloysia triphylla, Aloysia citriodora, Lippia citriodora, Verbena citriodora, and Verbena triphylla	2	Antioxidant, anti-inflammatory, nematicidal, antimycotic, mosquito repellent

LIRIODENDRON TULIPIFERA L.	cortex	American tulip tree, Yellow-poplar	2	Tumor cell growth inhibitory, antimicrobial
LITHOSPERMUM OFFICINALE L.	folium, radix, semen, fructus	European stone seed, Common Gromwell	2	Hyperthyroidism, antioxidant, antigonadotropic, TSH- and prolactin-suppressing, antitumor
LITSEA CUBEBA PERS.	fructus	May Chang, Mountain Pepper, Laurus cubeba	2	Anti-inflammatory, antifungal, antioxidant
LIPPIA DULCIS TREV.	flos, folium	Bushy Lippia, Hierba buena or Aztec Sweet Herb	2	Antiproliferative, sweet herb (Hernandulcin is a sweetening agent approx. 1000 times sweeter than sucrose), anti-inflammatory, antibacterial
LIQUIDAMBAR ORIENTALIS MILL.	balsamum, cortex	Oriental Sweet Gum, Liquidambar imberbe	2	Antibacterial
LIQUIDAMBAR STYRACIFLUA L.	balsamum	Sweet Gum	2	Chemopreventive
LIRIOSMA OVATA MIERS	lignum	Dulacia inopiflora, Muira Puama	0	Improving sexual performance
LITCHI CHINENSIS SONNER	semen	Lychee	2	Immunomodulatory, anticancer, antioxidant, anti-inflammatory
LOBARIA PULMONARIA HOFFM.	thallus	Lungwort	2	Antioxidant, anti-inflammatory, antiulcerogenic
LONICERA JAPONICA THUNB.	flos	Japanese Honeysuckle	2	Hypoglycemic, neuraminidase inhibitor, antihypertensive, antioxidant, anti-inflammatory
LOTUS CORNICOLATUS L.	herba	Bird's-foot Trefoil, Birdsfoot Trefoil, Birdfoot Trefoil, or Bird's Foot Trefoil	2	Anthelmintic, veterinary uses (rumen bacteria)
LUCUMA GLYCYPHLOEA MART-EIC.	cortex		0	Skin-lightening, antiacne, elastase, lipase inhibitor, antiaging
LYCOPODIUM CLAVATUM L.	herba, spora	Stag's-horn Clubmoss or Ground Pine	2	Antioxidant, antimicrobial, anti-inflammatory activity, acetylcholinesterase inhibitor
LYCOPUS EUROPAEUS L.	herba	Gypsywort	2	Reduction of bacterial resistance to antibiotic, treatment of hyperthyroid symptoms

LYCOPUS VIRGINICUS MICHX.	herba	Virginia water horehound	2	Antihormonal, antigonadotropic, antihormonal effects of plant extracts: TSH- and prolactin-suppressing properties
LYSIMACHIA NUMMULARIA L.	herba, radix	Creeping Jenny, Moneywort, Herb Twopence and Twopenny grass	2	Antimicrobial
LYSIMACHIA VULGARIS L.	herba	Yellow Loosestrife	2	Antifungal, antimicrobial
LYTHRUM SALICARIA L.	summitas	Purple Loosestrife	2	Hypoglycemic, antioxidant, anti-inflammatory, anti-nociceptive, antimicrobial, antidiarrheal
MACROCYSTIS PYRIFERA		Giant kelp	2	Antiviral
MAGNOLIA OFFICINALIS REHDER	cortex, flos	Houpu Magnolia	2	Anti-inflammatory, purgative, antipiretic
MAHONIA AQUIFOLIUM PURSH .	cortex, radix, fructus	Oregon-grape	2	Antioxidant, antifungal, treatment of mild to moderate psoriasis, antiproliferative activity against cell growth of human keratinocytes
MALPIGHIA EMARGINATA (ACEROLA)		Barbados-cherry, West Indian cherry	2	Antioxidant, hypoglycemic, hepatoprotective, chemopreventive
MAMMEA AMERICANA L.	flos, fructus, folium, resina	Mammee, mammee apple, Mamey, mamey apple, San Domingo apricot or South American apricot	2	Antiulcer, antioxidant, antibacterial, anti-Mycobacterium tuberculosis, insecticidal, molluscicidal.
MANGIFERA INDICA L.	folium, pericarpum	Mango, manako, meneke	2	Antioxidant, cytoprotective effect against HIV, anti-inflammatory, antibacterial, anti-herpes simplex virus, anti-nociceptive, gastroprotective and ulcer-healing (flowers), immunostimulating, anti-diarrhoeal, hypoglycemic (leaves)
MARCHANTIA POLYMORPHA L.	thallus	Liverwort	2	Antifungal, bacteriostatic

MARRUBIUM VULGARE L.	folium, herba c. floribus	White Horehound or Common Horehound	2	Antioxidant, hypoglycemic, antiedematogenic (inhibitory effect on pro-inflammatory agent-induced microvascular extravasation), analgesic, antihypertensive (vasorelaxant), antispasmodic
MARSDENIA CONDURENGO NICH.	cortex arboris	Condurango, Eagle vine	1	
MARSDENIA REICHENBACHII TR.	cortex arboris	Marsdenia cundurango, Cundurango, condorvine	1	
MEDICAGO SATIVA		Alfalfa, Lucerne, Purple Medic and Trefoil	2	Estrogenic activity, cancer treatment, antifungal, hypocholesterolemic, anthelmintic
MELALEUCA ALTERNIFOLIA CHEEL	oleum, summitas	Narrow-leaved Paperbark, Narrow-leaved Tea-tree, Narrow-leaved Ti-tree, or Snow-in-summer	3	Topical antiseptic agent, against dermatophytes, free-radical scavenger, anti-inflammatory, antibacterial and antifungal, antimycoplasmal
MELALEUCA LEUCADENDRON L.	folium, oleum, flos, cortex	Cajeput, White Tea Tree, Swamp Tea Tree, White Wood	2	Against herpes simplex virus, anti-proliferative, antibacterial, inhibitor of induced histamine release
MELALEUCA LEUCADENDRON L. VAR.CAJAPUTI R.	folium, oleum, flos, cortex	Cajuput Tree	2	Antibacterial, antifungal, gynaecological disease, antioxidant
MELALEUCA LEUCADENDRON L. VAR.VIRIDIFLORA	folium, oleum	Weeping tea tree	2	Anti-inflammatory, antibacterial, antifungal, immune stimulating
MELALEUCA LINARIIFOLIA SM.	summitas	Snow in Summer, Flaxleaf Paperbark	2	Germicidal
MELILOTUS OFFICINALIS PALLAS	flos, herba c. floribus	Yellow Sweet Clover, Yellow Melilot	2	Peripheral ischemic and venous diseases, treatment of chronic vascular diseases, radical scavenger
MELITTIS MELISSOPHYLLUM L.	folium, herba, flos	Bastard Balm, Melittis sylvestris, Melittis grandiflora	1	Eye inflammations, antispasmodic
MENTHA AQUATICA		Water mint, Mentha hirsuta	2	Antibacterial, antioxidant

MENTHA ARVENSIS		Corn mint, Mentha austriaca	2	Antioxidant, hypoglycemic, antibacterial, fungicidal, Inhibition of immunologic and nonimmunologic stimulation-mediated anaphylactic reactions (inhibition histamine release), antifertility property, postcoital antifertility, anthiovulatory activity
MENTZELIA CORDIFOLIA DON.	radix, summitas	Blazing star	1	Wound-healing agent
MENYANTHES TRIFOLIATA L.	folium	Buckbean, bogbean	2	Immunomodulating agent, anti-inflammatory
MEUM ATHAMANTICUM JACQ.	radix	Spignel	1	
MICHELIA CHAMPACA L.	folium, oleum, flos, cortex	Yellow Jade Orchid Tree, Fragrant Champaca, Fragrant Himalayan Champaca	2	anti-inflammatory, antipyretic, antimicrobial
MIKANIA AMARA WILLD.	herba, radix		1	
MIKANIA GUACO H. ET. B.	herba	Guaco	2	Anti-allergic, effects on allergic pneumonitis
MITCHELLA REPENS L.	herba	Partridgeberry	0	
MOMORDICA BALSAMINA L.	fructus	Balsam pear, Bitter melon, Balsam apple	2	High mineral supplementation, antimalarial, molluscicidal, antibacterial
MOMORDICA CHARANTIA L.	fructus, balsamum	Bitter melon or bitter gourd	3	Diabetes and its complications (nephropathy, cataract, insulin resistance), antibacterial and antiviral agent (including HIV infection), anthelmintic, abortifacient. Potential against Helicobacter pylori, efficacy in various cancers
MONARDA PUNCTATA L.	herba	Spotted beebalm	1	
MORINDA OFFICINALIS HOW.	herba	Morinda, Ba Ji Tan	2	Antiviral, anti-inflammatory and antinociceptive, antistress effect, hypoglycemic and anti-oxidant.
MORINGA APTERA GAERTN.	semen		1	
MORINGA OLEIFERA LAMK.	semen, oleum	Moringa	2	Antioxidant, anti-fungal, immunoenhancing

				activity, antihypertensive, antifungal, hypocholesterolaemic, hepatoprotective, regulation of thyroid hormone (hypothy.)
MORRENIA BRACHYSTEPHANA GRIS.	flos, radix, succus		1	
MORUS ALBA L	cortex ex radicibus, folium, radix	Common Mulberry, White Mulberry	2	Antiallergic, anticancer, antidiabetic, antioxidant, hypouricemic, anti-inflammatory, immunomodulating activity
MORUS NIGRA L.	cortex ex radicibus, folium	Black Mulberry	2	Antioxidant, antidiabetic, antinociceptive, anticancer
MUIRA PUAMA		Ptychopetalum olacoides, P. uncinatum	2	Chemopreventive, antioxidant, better physical performances, libido and sexual activity in premenopausal and postmenopausal women
MYOSOTIS SCORPIOIDES L.	flos, herba	Water Forget-me-not or True Forget-me-not	1	
MYRCIARIA DUBIA		CamuCamu, Cacari, and Camocamo	2	Antioxidant
MYRICA CERIFERA L.	cortex, fructus	Southern bayberry, southern wax myrtle, wax myrtle	2	Antithrombin activity
MYRICA GALE L.	folium, herba	Bog-myrtle and Sweet Gale	2	Anticancer, antioxidant, antifungal
MYRISTICA FRAGRANS HOUTT.	oleum	Common or Fragrant Nutmeg	2	Antibacterial, inhibition Helicobacter pylori, fecal excretion of cholesterol, serum reduction of cholesterol and LDL, antioxidant, anti-inflammatory, antithrombotic
MYROXYLON BALSAMUM PEREIRAE KL.	balsamum	Balsam of Peru, Toluifera Pereira. Myrospermum Pereira	1	Local treatment of burns and wounds. Contact allergy!
MYROXYLON BALSAMUM TOLUIFERUM H.B.K.	balsamum	Myroxylon balsamum, tolu balsam tree, tolu tree	1	
MYRRHIS ODORATA SCOP.	herba	Sweet Cicely	2	Antimicrobial

NARDOSTACHYS JATAMANSI DC	folium, radix	Nardostachys grandiflora, Spikenard	2	Hypolipidemic, lipid antioxidant, prevention of Parkinson, effectiveness in cerebral ischemia, nematocidal, antimicrobial, improvement of cognition and memory, anticonvulsant, hepatoprotective
NEPETA CATARIA L.	herba c. floribus	Catmint, Cataria vulgaris	2	Insect repellent, bacteriostatic and fungistatic
NEPHELIUM LAPPACEUM L.	semen	Rambutan	2	Antioxidant, Inhibition of herpes simplex virus type 1.
NIGELLA ARVENSIS L.	semen	Wild Fennel	2	Antimicrobial
NIGELLA DAMASCENA L.	semen	Love-in-a-mist, devil in the bush	2	Antimicrobial, estrogenic activity, digestive enzymes with lipase (from the seeds)
NYMPHOIDES PELTATA KUNTZE	herba	Yellow floating heart, water fringe	1	
OCIMUM BASILICUM		Sweet basil	3	Antimicrobial, anti-inflammatory, antiulcerogenic, antidiabetic, antifungal, hypolipidaemic, antioxidant, antitumoral, antiacne, antiplatelet, antiproliferative, antiviral (HIV)
OCIMUM GRATISSIMUM L.	folium	Wild Basil	3	Antinociceptive, antibacterial, anti-oxidant, anti-carcinogenic, radio-protective, antileishmanial, antifungal (dermatophytes), antidiabetic, wound-healing, antidiarrhoeal, antimalarial, enhancing normal hair growth and promoting follicular proliferation, anti-acne, hypotensive
OCIMUM SANCTUM L.	herba	Holy basil	2	Anticataract, antioxidant, cardioprotective, anticonvulsant, adaptogenic, chemopreventive
OLEA EUROPAEA L.	folium	Olive	3	Antioxidant, gastrointestinal disorders (abdominal colic, diarrhea, and constipation), antihypertensive, prevention of diabetes, Ca ⁺ -antagonistic, vasodilator action (leaf), antimicrobial, antifungal, treatment of

				asthma and rhinitis caused by pollen allergens
ONONIS ARVENSIS L.	herba, radix	Field restharrow	1	
ONONIS SPINOSA L.	herba, radix	Spiny restharrow	2	Antifungal, analgesic and hepatoprotective, antimicrobial.
ONOPORDON ACANTHIUM L.	herba, radix	Scotch thistle	2	Antioxidant
ONOSMA ECHIOIDES L. S.L.	radix		2	Antitussive, antibacterial, prevention of exptl. skin carcinogenesis
OPHIOGLOSSUM VULGATUM L.	fronda	Southern adderstongue	1	
OPHIOPOGON JAPONICUS KER-GAW.	radix	Mondo grass, Fountain plant, monkey grass, Dwarf Lilyturf	2	Antithrombotic, prevention and repair of cerebral ischemia-reperfusion injury, cognition-enhancing activities, anti-amnestic effects, preventing cerebral oxidative damage in rat, stimulation of melanocyte proliferation, antioxidant, anti-inflammatory, endothelium protective, antiadhesive activity, PAF receptor binding inhibitor
OPHIORRHIZA MUNGOS L.	radix		2	Antiviral, treatment of fungal skin disorders
OPOPANAX CHIRONIUM KOCH.	gummi,resina	Malabaila opopanax, opopanax	1	Induces apoptosis in leukemia cells
OPUNTIA FICUS-INDICA MILL.	flos	Indian Fig Opuntia, cactus pear	3	Wound healing, attenuates neuronal injury, hepatoprotective, antiulcerogenic, antioxidant, neuroprotective, hypoglycemic, depigmentant agent, protective in cartilagen alteration, anti-inflammatory, diuretic
ORCHIS MASCULA L.	tuber	Early Purple Orchid	2	Beneficial effects of various degrees with respect to the sexual behavior of animals

ORIGANUM DICTAMNUS L.	flos, folium, herba c. floribus	Dittany of Crete or Hop Marjoram	2	Cytotoxic, antimicrobial and antioxidant
ORIGANUM MAJORANA		Sweet Marjoram or Knotted Marjoram	3	Chemopreventive, antimicrobial, smooth muscle relaxing effect, antioxidant, gastrointestinal disorders, antifungal, NO- suppressing activity, antidiabetic, antihepatoma, cytotoxic, antiviral. ALLERGY due to ingestion.
ORIGANUM VULGARE		Oregano or Pot Marjoram	3	Antimicrobial, anti-inflammatory, antiplatelet, cytotoxic, antifungal, anti- hyperglycemic, immunostimulatory, diabetes and hypertension management , antithrombin, anticancer. Abort inducing
ORTHOSIPHON STAMINEUS BENTH	folium, herba c. floribus		2	Radical scavenger, diuretic, saluretic, uricosuric actions, antioxidant and hepatoprotective, alleviating hyperglycemia and improving lipid profile
OSMUNDA REGALIS L.	folium		0	
OXALIS ACETOSELLA L.	folium	Wood-sorrel	0	
OXYCOCCUS PALUSTRIS PERS.	fructus	Cranberry, Vaccinium oxycoccos	2	Preventive effect on colitis
PACHIRA AQUATICA AUBL.	semen, folium	Malabar chestnut, provision tree, saba nut, money tree, Carolinea macrocarpa, Bombax macrocarpum, Bombax glabrum, Pachira macrocarpa	1	
PACHIRA INSIGNIS SAV.	folium	Guiana chestnut	1	

PAEONIA LACTIFLORA PALL.	semen	Peony	3	Anti-inflammatory, antihyperpigmentation, apoptotic, cytotoxic, anticancer, immunomodulatory and immunopotentiating, gynecological disorders, treatment of cardiovascular disorders such as atherosclerosis, inhibition of collagen synthesis and decreasing oxidative stress, antioxidant, antiangiogenetic, antiviral, antihyperglycemic
PAEONIA OFFICINALIS L.	flos, radix		0	
PALAQUIUM BORNEENSE BURCK.	latex	Borneo Gutta-percha	0	
PALAQUIUM GUTTA BURCK.	latex	Croixia gutta, Isonandra gutta, Palaquium acuminatum, suntek, saeo, chik nom, gutta percha tree	0	
PALAQUIUM OBLONGIFOLIUM BURCK.	latex	Palaquium gutta	1	
PANAX GINSENG C.A. MEYER	folium, radix	Ginseng	3	Root: anti-tumor, adaptogen, stimulant and tonic, angiomodulating and steroid-like activities, Cerebroprotective, antiapoptosis, antioxidant, afrodisiac, encourages the secretion of hormones, improves stamina, antidiabetic, decreases cholesterol levels, radioprotective. Use for depression, acute anxiety or acute inflammatory disease, prevention of respiratory symptoms, respiratory tract infections
PANAX NOTOGINSENG CHEN.	folium, radix	Panax pseudoginseng notoginseng	3	Analgesic, anti-inflammatory, antiseptic, astringent, cardiogenic, diuretic, haemostatic, hypoglycemic, cytotoxic, hepatoprotective, immunoactive, estrogen-like activity, neurostimulant

PANAX PSEUDOGINSENG WALL.	folium, radix		2	Antioxidant, estrogenic activity, anti-fungal, anti-viral, antitumor, antimicrobial, anti-inflammatory, aphrodisiac, cardiogenic, diuretic, hypoglycemic, stimulant
PANAX QUINQUEFOLIUM L.	folium, radix	American Ginseng	3	Adaptogen, cardiogenic, sedative, stimulant, stomachic, anticancer, prevention of respiratory symptoms, respiratory tract infections, antioxidant, antiglycemic, immunomodulating, estrogenic activity, anti-human immunodeficiency virus, antifungal
PANICUM MILIACEUM L.	fructus	Broomcorn millet, Proso millet, common millet, hog millet or white millet	2	Hepatoprotective, protective effect against the risk of coronary heart disease, inhibit human amylase
PANZERIA LANATA BGE.	herba		0	
PAPAVER RHOEAS L.	flos, semen, folium	Corn Poppy, Field Poppy, Flanders Poppy, or Red Poppy	2	Treatment of withdrawal signs in opioid addicts, antioxidant
PARIETARIA OFFICINALIS L.	herba	Pellitory Of The Wall, Lichwort	3	Local intranasal immunotherapy, the major cause of respiratory allergy
PARMELIA SAXATILIS ACH.	thallus	Skull lichen	2	Antioxidant and antimicrobial
PARTHENIUM HYSTEROPHORUS L.	herba	Parthenium weed, Santa Maria feverfew	3	Trypanocidal activity, anti-tumor, anti-angiogenic activity, antifungal, antioxidant, gastric cytoprotective, Causes dermatitis, respiratory allergy
PASSIFLORA EDULIS SIMS.	herba	Passion fruit	2	Anti-inflammatory, anxiolytic, sedative, antioxidant, antifungal, hair restoring, favorable effect on intestinal health

PASSIFLORA INCARNATA L.	herba c. floribus	Maypop, Purple passionflower	3	Analgesic, anxiolytic, treatment of opiates withdrawal, antitussive, antiasthmatic, aphrodisiac (prevention of azospermia, sterility and decreased libido), antimicrobial. Adverse effects: severe nausea, vomiting, drowsiness, prolonged QTc, and episodes of nonsustained ventricular tachycardia following self-administration of Passiflora incarnata, at therapeutic doses
PAULLINIA CUPANA H.S.K.	semen, pasta	Guarana	3	Analgesic, adaptogen (anti-stress, memory enhancement, increased physical and/or sexual performance), weight loss and delayed gastric emptying, antidepressant-like effect, antioxidant, antimicrobial, stimulant effect on the cardiovascular and nervous system, ergogenic and "fat burning" effects, antiaggregatory, cytotoxic. Caffein from Guarana: stroke, myocardial infarction, and sudden death
PAYENA LEERII KURZ.	latex	Azaola leeri, Ceratophorus leerii	0	
PEDALIUM MUREX L.	fructus, semen, folium	Burra Gookeroo	2	Diuretic, spasmodic, hypotensive, larvicidal, aphrodisiac, antiseptic and antibilious, urinary lithiasis
PEDICULARIS PALUSTRIS L.	herba	Marsh Lousewort	1	
PEDILANTHUS PAVONIS BOISS.	folium		1	
PELARGONIUM GRAVEOLENS L 'HERIT	flos, folium	Rose-scented geranium, sweet scented geranium	2	Antimicrobial, immunomodulating effects, insect repellent, anti-inflammatory, antioxidant, nematocidal, antifungal
PELARGONIUM RADULA L'HERIT	flos, folium	Pelargonium radens	2	Antimicrobial, hypoglycemic

PERILLA FRUTESCENS		Beefsteak plant, Ji Soo, Perilla, Purple Perilla, Shiso, Wild basil, Wild red basil, Chinese basil, Purple mint, Rattlesnake weed, Summer coleus	3	Anti-asthmatic, potent anti-tumor, Vasodilative, antiallergic, anti-inflammatory, antibacterial, antioxidant, hepatoprotective, antinephropaty, inotropic, lusitropic, antiviral whitening agent
PETIVERIA ALLIACEA L.	folium, radix	Guinea henweed, anamu	3	Antibacterial, antifungal, antinociceptive, antiviral, anti-proliferation/cytotoxic activity, anti-rheumatic medicine
PETROSELINUM CRISPUM A.W.HIL.	radix, fructus	Parsley	3	Antiphenylketonuria, antioxidant, hepatoprotective, antiulcerogenic, diuretic, estrogenic activity improvement of memory and cognition, antihypertensive, antidiabetic.
PEUCEDANUM OFFICINALE L.	radix	Hog's Fennel	1	
PEUCEDANUM OREOSELINUM MOENC.	fructus		1	
PEUCEDANUM OSTRUTHIUM KOCH.	rhizoma	Masterwort, Imperatoria ostruthium	2	Antimycobacterial, antiphlogistic and antipyretic, calcium antagonistic activity
PEUMUS BOLDUS MOLINA	cortex, folium	Boldu	2	Hepatoprotective, anti-inflammatory, antipyretic, antioxidant, chemoprotective, antimicrobial, photoprotector, induces contraction of skeletal muscle, cytoprotective (treatment of biliary lithiasis, hepatic insufficiency and liver congestion)
PFAFFIA PANICULATA		Suma, Brazilian ginseng	3	Antineoplastic, cancer chemopreventive, analgesic, antiinflammatory, antioxidant, hypoglycemiant, sexual stimulant, possible adaptogen. Occupational asthma caused by Brazil ginseng dust.

PHASEOLUS VULGARIS	fructus sine semine	Raw kidney bean	3	Antioxidant, chemopreventive, nutrient-dense, fiber-rich, high-quality sources of dietary protein, treatment of obesity and hypertriglyceridemia, health-promoting effects, salutary effects on renal functions, cholesterol levels decrease, improves diabetes mellitus, vascular health, preserves bone mineral d., decreases menopausal symptoms
PHILLYREA LATIFOLIA L.	folium	Phillyrea media	2	Anti-inflammatory, hepatoprotective
PHRAGMITES AUSTRALIS TRIN.	radix	Common Reed, Arundo phragmites, Phragmites communis, Phragmites vulgaris	2	Antioxidant, antiviral
PHYLLANTHUS AMARUS		Carry me seed	3	Anticancer, antiviral (HBV), hypoglycemic, hypocholesterolemic, antibacterial, antimalarial, antiulcer, anti-inflammatory, antidiarrhoeal, antioxidant, antiallodynic, antiedematogenic, diuretic, hypotensive, antinociceptive, contraceptive
PHYLLANTHUS EMBLICA L.	fructus	Indian gooseberry, amla, Emblica officinalis	3	Antioxidant, antidiabetic, antihyperglycemic, antibacterial, antiulcer, cytoprotective, hepatoprotective, antiviral, immunomodulatory, anti-inflammatory, antitussive, analgesic, antipyretic, antiallergic, antiatherogenic, memory enhancing activity, dyslipidemia preventive
PHYLLANTHUS NIRURI L.	folium, herba	Stone-breaker, chanca piedra and quebra pedra	3	Anti-hepatotoxic, anti-lithic, anti-hypertensive, anti-HIV, anti-hepatitis B, diuretic (angiotensin-converting enzyme inhibitor), hepatocurative, antioxidant, lipid lowering activity, antimalarial, hypoglycemic

PHYLLITIS SCOLOPENDRIUM NEWM.	folium, herba	Hart's-tongue, Hart's Tongue Fern, Asplenium scolopendrium	1	Respiratory and lung affection
PHYSALIS PERUVIANA L.	folium	Physalis, Cape gooseberry, ground-cherry, golden berry, uchuva, or Inca berry	2	Antioxidant, apoptotic, antihepatoma, antitumor, antimicrobial, anti-inflammatory
PICRAMNIA ANTIDESMA SW.	cortex		2	Cytotoxic, antimalarial
PICRASMA EXCELSA PLANCH.	cortex, lignum	Bitter-ash, bitterwood, Jamaica quassia, Jamaica quassiawood, lofty quassia, Picraena excelsa, Quassia excelsa, Simarouba excelsa	2	Pancreatic lipase activity
PICRASMA QUASSIOIDES BENN.	lignum	Nigaki	2	Antioxidative, inhibitor of cAMP phosphodiesterase, antiherpes, insecticidal, antimycotic, cytotoxic
PICRORHIZA KURROA ROYLE	rhizoma	Kuru, kutki	3	Hepatoprotective, anti-cholestatic, antioxidant and immunomodulatory activity, anti-inflammatory, Antiasthmatic
PIMENTA RACEMOSA MOORE	fructus, folium, oleum	Bay Rum Tree	3	Antinociceptive, anti-inflammatory, infectious gynaecological disease, antibacterial, insecticidal, antifungal
PIMPINELLA MAJOR HUDSON	radix	Greater burnet saxifrage	1	
PIMPINELLA SAXIFRAGA L.	herba, radix, rhizoma	Solidstem burnet saxifrage	0	
PINCKNEYA PUBENS MICHX.	cortex	Bitter Bark, Georgia Fevertree, Pinckneya bracteata	0	
PINUS MUGO		Mugo pine	2	Antioxidant
PINUS SYLVESTRIS		Scots Pine	2	Antimicrobial, antioxidant, anti-inflammatory, antiplatelet, adrenal cortex stimulant, anthelmintic

PIPER ANGUSTIFOLIUM RUIZ-PAV.	folium	Piper aduncum, Matico, spiked pepper	2	Antimicrobial
PIPER BETLE L.	folium	Betel	2	Antidiabetic, anti-giardial, anti-amoebic, antioxidant, anti-inflammatory, anti-adherence effect, antifertility, antimicrobial, stimulatory influence on pancreatic lipase activity. Chromosome-damaging activity of saliva of betel nut and tobacco chewers
PIPER CUBEBA L.F.	fructus	Cubeb, tailed pepper, Java pepper	2	Antioxidant, antifungal, trypanocidal, analgesic, anti-inflammatory, antiviral (HCV)
PIPER LONGUM		Long pepper	3	Antiasthmatic, immunomodulatory anticancer, prevention against allergic rhinitis (antihistaminic, anti-inflammatory, antispasmodic, antioxidant, mast-cell stabilization activities), analgesic, female contraceptive, anti-giardiasis, anti-amoebic, anti-ulcer, antiplatelet aggregation, inhibition of nitric oxide (NO) and TNF- α production, hepatoprotective. Herb-drug interactions
PIPER METHYSTICUM FORSTER	rhizoma	Kava	3	Central psycholeptic activities, such as analgesic or anxiolytic actions, analgesic and anesthetic, TNF- α release inhibitors, apoptotic. Herb-drug interactions (Cyt p450, Glycoprotein P), hepatotoxicity, fulminant hepatic failure
PISTACIA LENTISCUS L.	resina, radix	Mastic, Evergreen pistache	3	Antifungal, Antioxidant, cytotoxicity, hepatoprotective, antiproliferative, apoptotic, anti-ulcer activity, antimicrobial, antimycotic
PISTACIA TEREBINTHUS L.	cortex	Terebinth, turpentine tree	2	Antifungal, antioxidant, anti-inflammatory
PITHECELLOBIUM AVAREMOTEMO MA.	oleum		2	Antimicrobial

PLANTAGO AFRA L.	semen	African plantain, black psyllium, flea-seed plant, fleawort, psyllium,	0	
PLANTAGO ARENARIA POIRET	semen	French Psyllium, Plantago indica, Plantago psyllium, Plantago ramosa	3	Weight control, hypoglycemic, antihyperlipidemia, treatment of constipation, diarrhea, irritable bowel syndrome, inflammatory bowel disease-ulcerative colitis, colon cancer, use in drug delivery systems
PLANTAGO LANCEOLATA L.	folium, herba c. floribus	Ribwort Plantain	3	Antioxidative, immunotherapy, moderate bioadhesion to epithelial tissue, anthelmintic, hepatoprotective, cytotoxic, anti-inflammatory. Seasonal respiratory allergy
PLANTAGO MAJOR L.	folium, herba c. floribus, semen	Common Plantain, waybread	2	Anti-infective action, antidiarrhoeal, prophylactic for mammary cancer, wound healing activity, anti-inflammatory, analgesic, antioxidant, weak antibiotic, immunomodulating and antiulcerogenic activity, cytotoxic, antiviral
PLANTAGO MEDIA L.	folium	Hoary Plantain	1	Translational inhibitory activities
PLANTAGO OVATA FORSK.	semen, tegumentum seminis	Blond Psyllium, Plantago decumbens, Plantago ispaghula	3	Laxative, cervical dilator, reducing postoperative pain and tenesmus after open hemorrhoidectomy, treatment of Crohn's disease, hypoglycemic, antihypercholesterinemia, supplement in weight control diets. Psyllium hypersensitivity. Anaphylactic shock due to ingestion of psyllium laxative. Ingestion of fiber modifies oral absorption and pharmacokinetics of drugs
PLUMBAGO EUROPAEA L.	herba, radix	Plumbago, Plumbago angustifolia	1	
POGOSTEMON CABLIN BENTH.	folium	Patchouli	2	Cytotoxic tumor cells, antibacterial, antifungal

POLLINE		Pollen	3	Diagnosis and immunotherapy of allergic disorders (atopic dermatitis, seasonal allergic rhinitis). Allergy: rhinoconjunctivitis symptoms, skin sensitivity, and specific nasal reactivity
POLYGALA AMARA L.	herba c. floribus, radix	Bitter Milkwort, Polygala amarella, Polygala austriaca, Polygala uliginosa	2	Enhancement of granulocyte phagocytosis
POLYGALA VULGARIS L. S.L.	herba, radix	Milkwort, Polygala oxyptera	2	Antioxidant
POLYGONUM AVICULARE L.	herba	Knotweed, Polygonum heterophyllum, Polygonum littorale	3	Treatment of gingivitis, interferon-like activity, inhibitors of angiotensin-converting enzyme, anti-inflammatory
POLYGONUM BISTORTA L.	herba, radix, rhizoma	Bistort, Bistorta major, Persicaria bistorta	2	Anticancer
POLYGONUM CUSPIDATUM		Japanese Knotweed, Polygonum japonicum, Polygonum sieboldii, Reynoutria japonica	3	Anti-inflammatory, cardioprotective, neuroprotective, cancer chemopreventive, antidiabetic, antiviral, osteoporosis prevention, treatment of gout and other hyperuricemia-related disorders, cell growth-modulatory, antibacterial, antiangiogenic
POLYGONUM DUMETORUM L.	herba	Tiniaria dumetorum, Fallopia dumetorum	1	
POLYGONUM HYDROPIPER L.	herba	Smartweed, Persicaria fastigiatoramosa, Persicaria hydropiper, Polygonum fastigiatoramosum, Polygonum maximowiczii	2	Antitumor-promoting activity, estrogenic effects, antinociceptive, antiovaratory, antifertility
POLYGONUM MULTIFLORUM THUNB.	rhizoma, cortex	He Shou Wu, Fallopia multiflora	3	Anticancer, estrogenic, antiproliferative, cardioprotective, antiatherosclerosis, anti-inflammatory. Hepatotoxicity

POLYGONUM PERSICARIA L.	folium	Red Leg, Persicaria maculosa, Persicaria persicaria	1	
POLYPODIUM CALAGUALA RUIZ.	radix, rhizoma	Calaguala, Calahuala	3	Anti-inflammatory, antitumor, treatment of skin disorders, including psoriasis (anti PAF receptor)
POLYTRICHUM COMMUNE L.	herba	Common Hair Cap Moss, Common Hair Moss	0	
POPULUS ALBA L.	cortex, gemma	White Poplar, Abele-tree	0	Allergy
POPULUS BALSAMIFERA L.	gemma	Balsam Poplar	2	Cytotoxic cancer cells
POPULUS NIGRA L.	cortex, gemma, lignum	Lombardy poplar, Black Poplar	0	
POPULUS TREMULOIDES L.	cortex, gemma	Quaking Aspen, Trembling Aspen	0	
PORPHYRA PALMATA (Alga Nori)		Sloke	2	Antioxidant and antiproliferative activities
POTENTILLA ARGENTEA L.	rhizoma, herba c. floribus	Silvery Cinquefoil	1	
POTENTILLA ERECTA RAUSCHEL	rhizoma, herba	Tormentil	2	Antioxidant, anti-inflammatory, cytotoxic
POTENTILLA REPTANS L.	rhizoma	Creeping cinquefoil	2	Antihypercholesterolaemic, antioxidant activity, anti-ulcerogenic
POTENTILLA ANSERINA L.	rhizoma, herba c. floribus	Silverweed	1	
PRANGOS PABULARIA LINDL.	fructus	Prangos pachypoda	2	Antioxidants, antibacterial activity and inhibition of cytokine release, potentiates the responses to adrenaline and noradrenaline, respiratory and central nervous stimulant actions
PRIMULA ELATIOR SCHREB	flos, radix	Oxlip, Oxslip or True Oxlip	2	Treatment of epilepsy and convulsions, inducing sedation, antioxidant. Allergy
PRIMULA OFFICINALIS HILL.	flos, radix	Primula odorata	3	Antioxidant, normalization of the heart rate

PRIMULA VERIS L. EM.HEIDS	radix	Cowslip, <i>Primula officinalis</i>	2	Anxiolytic, treatment of epilepsy and convulsions, inducing sedation
PRIMULA VULGARIS HUDS.	flos,radix	Primrose, <i>P. acaulis</i>	3	Spermicidal, antifungal, cytotoxic. Short-lived occupational skin symptoms of irritant or urticarial nature
PROPOLIS	resina		3	Antibacterial, antifungal, antiviral, antioxidant, antithrombotic, immunomodulatory, hepatoprotective, antiproliferative, antitumoral. Allergy
PROTIUM GUIANENSE MARCH.	resina		2	Antiprotozoal
PROTIUM HEPTAPHYLLUM MARCH.	resina, lignum		2	Antiplatelet, anxiolytic, antidepressant, antimicrobial, antioxidant, antinociceptive, gastroprotective, hepatoprotective, anti-inflammatory, antifungal
PROTIUM ICICARIBA MARCH.	resina		1	
PRUNELLA VULGARIS L.	folium, herba	Common selfheal, <i>Prunella caroliniana</i>	3	Antimutagenic, inhibited systemic anaphylactic shock, antiarthritic, antioxidative, antimicrobial, antiviral, antihyperglycemic, cytoprotectivity, immunomodulatory, oral hygiene
PRUNUS ARMENIACA L.	semen amarus	Apricot, <i>Armeniaca vulgaris</i> , albaricoque, damasco, Siberian apricot	2	Antiviral, whitening agents for UV-sensitive skin, anticancer, antimicrobial, antifungal
PRUNUS LAUROCERASUS L.	semen, fructus	Cherry laurel, <i>Cerasus laurocerasus</i> , <i>Laurocerasus officinalis</i>	2	Antioxidant
PRUNUS MAHALEB L.	semen	Mahaleb Cherry	1	Antioxidant, antifungal
PRUNUS PADUS L.	cortex	Bird Cherry, <i>Cerasus padus</i>	2	Antioxidant, antimicrobial

PRUNUS PERSICA BATSCH.	cortex, flos, folium	Wild peach	3	Antitussive, whitening agent, hypocholesterolemic, antitumor, anticongestive edema, estrogenic and antiproliferative, hepatoprotective, antifibrosis, laxative, gynecological disorders, fungitoxicity, antioxidant, antiviral
PRUNUS SEROTINA EHRH.	cortex, folium	Black cherry	2	Anti-proliferative
PRUNUS SPINOSA L.	flos, folium, fructus, succus fructus	Blackthorn	2	Antioxidant, antimicrobial, reduced responses to norepinephrine, epinephrine and histamine
PSEUDOWINTERA COLORATA		Horopito	2	Insecticidal, anti-Candida. Contact vulvitis due to Pseudowintera Colorata
PSIDIUM GUAJAVA L.	folium	Guava	3	Antifungal, antimicrobial, antiplasmodial, antiamoebic, antidiarrhoeal, antihypertensive, anti-inflammatory, analgesic, antidiabetic, antiglycative agent (cardiovascular and neurodegenerative diseases) antiadherence activity, inotropic, antispasmodic, anticough, antiproliferative.
PSIDUM ARACA RADDI.	cortex, folium, fructus, radix	Psidium guineense	1	
PTEROCARPUS DRACO L .	resina	Corticeira, Mututi, Tinteira, Lingoum officinale, Moutouchi crispata, Moutouchi suberosa, Pterocarpus belizensis, P:crispatus, P. hemipterus, P. moutouchi, P. suberosus	2	Antifungal, antimicrobial.
PTEROCARPUS ERINACEUS POIR.	succus inspissatus	Pterocarpus angolensis, Pterocarpus echinatus	2	Antioxidant and antibacterial, antigonadotropic, antimalarial, inhibited gonadotropin release as an antiestrogen-like substance

PTEROCARPUS INDICUS WILLD.	lignum	Burmese Rosewood, Pterocarpus carolinensis, Pterocarpus indica, Bloodwood, Cibicibi, Padouk, Sandrigo, Sang Drago, Sang Dragon	2	Antifungal, antibacterial
PTEROCARPUS MARSUPIUM ROXB.	succus inspissatus	Malabar Kino, Indian kino tree, malabar tree, kino	3	Antidiabetic, hypoglycemic, cardiogenic, anticataract, antioxidant, anti-inflammatory
PTEROCARPUS SANTALINUS L. F.	lignum	Red Sandalwood, Sandalwood	2	Wound healing, inhibitory effect on tumor necrosis factor- α , hepatoprotective, anti- diabetic, anti-inflammatory, anti-oxidant, anti-UV effect, anti-hyperlipidemic, anti- androgenic, anti-bacterial and anti-tumor, antiulcer
PTYCHOPETALUM OLACOIDES BEN.	cortex, cortex ex radicibus, lignum	Muiru puama, Liriosma ovata	3	Neuroprotective, antioxidant, anticholinesterase activity (nerve tonic), antiviral, promnesic effect, adaptogen, memory retrieval improvement, anxiogenic, vasorelaxant
PULMONARIA OFFICINALIS L.	folium, herba c. floribus	Polmonaria maculata, P.maculosa	2	Treatment of respiratory, gastrointestinal and other inflammatory disorders, antioxidant activity
PUNICA GRANATUM L.	cortex, flos, fructus	Pomegranate	3	Antioxidant, cytoprotective, chemoprevention of prostate cancer and human breast cancer, antiplaque, antibacterial, adjunctive periodontal treatment of periodontal suppressive therapy, hypoglycemic, antiviral, anticandidosis, antidiarrhoeal, anti-inflammatory, lowering circulating lipids, wound healing, antiangiogenic, suppression of nuclear factor-kappa B. Pomegranate juice inhibited human CYP2C9 activity

PYROLA ROTUNDIFOLIA L.	folium	Round-leaved Wintergreen	3	Anti-inflammatory, analgesic, prevention of ototoxicity
PYRUS COMMUNIS L.	folium	Common pear	2	Antioxidant, antiproliferative, anticancer
QUASSIA AMARA L.	lignum	Quassia wood, Amargo, Quassia alatifolia, Q. officinalis, Q. amargo, Simaroube officinale	2	Antimalarial, analgesic, antiedematogenic, antiulcerogenic, male antifertility, antibacterial, antifungal
QUERCUS ALBA L.	cortex, fructus, lignum	White oak	3	Antioxidant, antibiotic. Anaphylactic reaction to ingestion of Quercus ilex acorn nut
QUERCUS COCCIFERA L.	cortex	Kermes Oak	2	Gastroprotective, anti-lipoperoxidant, anti-ulcerogenic
QUERCUS ILEX L.	cortex, fructus, lignum	Holm Oak, Holly Oak or Evergreen Oak	3	Antimicrobial, gastroprotective. Anaphylactic reaction to ingestion of Quercus ilex acorn nut
QUERCUS INFECTORIA OLIV.	galla	Aleppo oak, Asian holly-oak, Dyer's oak	2	Antimicrobial, antiodour, bacteriostatic, bactericidal, NO and super oxide inhibitor, anti-UV, antiviral (HCV), hypoglycemic, analgesic, SNC depressant, anticariogenic, antidiarrheic, antiamoebic, anti-inflammatory
QUERCUS PEDUNCOLATA		Quercus robur pedunculata	0	
QUERCUS PETRAEA LIEBL.	cortex, folium, semen	Sessile Oak, Durmast Oak	1	
QUERCUS PUBESCENS WILLD.	cortex	Downy Oak, Pubescent Oak	0	
QUERCUS ROBUR L.	cortex, folium, semen, lignum, galla	Pedunculate Oak	2	Antioxidant, antinematode
QUERCUS SUBER L.	cortex	Cork Oak	3	Tensor and smoothing effect on human skin, antimutagenicity, gastroprotective

QUILLAJA SAPONARIA MOL.	cortex	Cullay, Killaya, Murillos Bark, Quillaia, Soap Bark Tree, Soap Tree, Soapbark, Soapbush	3	Antiviral, immunoenhancing activity, hypocholesterolemic, drug delivery, antibacterial, membrane permeabilizant
QUILLAJA SMEGMADERMOS DC.	cortex	Quillaja saponaria, quillaia	0	
RAPHANUS SATIVUS L.	semen	Cultivated radish, Raphanus raphanistrum sativus	2	Hepatoprotective, chemoprevention, antiproliferative, antioxidant, citotoxicity, purgative, antiviral, uterotonic, antiurolithiatic, antibacterial, whitening agent
RAPHIA PEDUNCULATA BEAUV.	amylum	Raphia farinifera, raffia	1	
RAVENSARA AROMATICA GMEL.	fructus	Clove nutmeg	2	Infectious gynaecological disease, antioxidant, antimicrobial, fungicidal, antiviral
RHAMNUS ALPINUS L.	cortex, fructus	Alpine Buckthorn	0	
RHAMNUS ALPINUS L. SSP FALLAX M ET P.	cortex, fructus		2	Purgative
RHAMNUS CATHARTICA L.	cortex, fructus immaturus	Common buckthorn, European buckthorn	-1	Hepatocellular toxicity
RHAMNUS FRANGULA L.	cortex	Glossy buckthorn	2	Antifungal, antiviral, antileukemic
RHAMNUS PURSHIANA DC	cortex arboris	Cascara buckthorn	2	Anti-hepatoma, laxative, antiviral. Weak promoters in rat colon carcinogenesis.
RHEUM EMODI WALL.	radix	Gilgiti rhubarb, Indian Rhubarb, Rheum australe	2	Antimicrobial, treatment and prevention of hyperglycemia assocd. diabetes mellitus, antifungal
RHEUM OFFICINALE BAILL.	radix, rhizoma	Chinese rhubarb	3	Antiviral (SARS), purgative, anti-inflammatory, anti-pyretic, antioxidative, free radical-scavenger, treatment of neonatal jaundice, preventing progression of chronic renal failure, potent inhibitor of tyrosinase activity and melanin biosynthesis, hepatoprotective

RHEUM PALMATUM L. VAR. TAGUNTICUM MAXIM	radix, rhizoma	Turkey Rhubarb	3	Anticancer, antinephrotoxic, antiviral, topical anti-inflammatory, apoptotic, dose dependent immunomodulatory, antiadhesive and antimigration of tumor cells, purgative, estrogenic activity. Risk of hepatotoxicity
RHEUM RHAPONTICUM L.	radix, rhizoma	Rhubarb.	3	Medication for women with menopause-related anxiety and improves their health state and general well-being
RHEUM UNDULATUM L.	radix, rhizoma	Rheum rhabarbarum	2	Vasorelaxant, antibacterial, antidiabetic, anti-allergic, anti-inflammatory, antihemostatic.
RHODIOLA CRENULATA			2	Anti-diabetes, anti-blood coagulation.
RHODIOLA ROSEA L.	radix	Golden Root, Roseroot stonecrop, Rhodiola roanensis, Sedum rosea	3	Anticancer (prostate cancer), inhibitory activity against Staphylococcus aureus, anti-aging, anti-oxidative stress, stimulating and adaptogenic properties, treatment of patients with acute non-specific pneumonia.
RHODODENDRON FERRUGINEUM L.	folium	Komar, Rododendro, Rusty-Leaved Alprose.	0	
RHODYMENIA PALMATA		Dulse, Palmaria palmata	1	Potential protein source in the human diet.
RHUS AROMATICA AITON	cortex ex radicibus	Squaw-bush, Fragrant sumac, Rhus trilobata.	2	Potential source of free radical scavengers, treatment for infections of the urogenital system and related inflammatory diseases.
RHUS CORIARIA L.	folium	Sicilian sumac	2	Antimicrobial, antioxidant.
RHUS GLABRA L.	fructus	Staghorn sumac, Datisca hirta ., Rhus hirta, Sudworth	2	Antimicrobial, antifungal activity.
RIBES RUBRUM L.	folium	Cultivated currant, Ribes sativum, Ribes sylvestre, Ribes vulgare.	2	Potential chemopreventive, anti-inflammatory.
RIBES UVA-CRISPA L.	folium	European gooseberry	0	

ROBINIA PSEUDACACIA L.	flos	Black Locust, Common Locust, False Acacia, Robinier, White Locust, Yellow False Acacia, Yellow Locust	1	
ROCCELLA TINCTORIA DC	thallus	Cudbear, litmus, dyer's moss, lacmus, orchilla weed, tournesol, turnesole	0	
ROSMARINUS OFFICINALIS L.	oleum	Rosemary, Rosmarinus officinalis.	2	Antitumor, decreases cortisol level in saliva, radioprotective, peroxydase scavenger, HIV protease inhibitors, antimicrobial, antioxidant, antimycotic, protective effect against oxidative damage to DNA, antispasmodic in renal colic, hepatoprotective. Contain compounds that are either carcinogenic or toxic to mammals.
RUBIA CORDIFOLIA L.	radix, rhizoma	Indian Madder	2	Antitumor activities, inhibit protein biosynthesis, antiproliferative property, antiviral activity, anti-inflammatory, possible calcium channel antagonistic.
RUBUS FRUTICOSUS L.S. L.	folium	Shrubby blackberry	2	Inhibit tumor promotion, antioxidant, hyaluronidase inhibitory activity, anti-aging active, antimicrobial.
RUBUS IDAEUS L.	folium	American red raspberry	2	Cancer suppressive action, anti-inflammatory, antioxidant, relaxant activity, anti-obese action.
RUMEX ACETOSA L.	herba, radix, folium	Garden sorrel	2	Antitumor activity, antimutagenicity, cytotoxicity.
RUMEX ACETOSELLA L.	herba, radix, folium	Common sheep, Acetosella acetosella, Acetosella tenuifolia, Acetosella vulgaris.	3	Potent antioxidant and DNA-protective activity.
RUMEX ACUTUS SM.	radix, folium	Rumex conglomeratus	1	

RUMEX ALPINUS L.	herba, radix, rhizoma	Munk's rhubarb, Alpine Dock	2	Treatment of insane and mentally disturbed people.
RUMEX AQUATICUS AUCT. NON L.	radix, folium	Rumex longifolius, Rumex domesticus	1	
RUMEX CRISPUS L.	folium, radix, rhizoma	Curly dock	-1	Antimicrobial. Fatal poisoning by ingestion.
RUMEX OBTUSIFOLIUS L.	radix	Bitter dock, Acetosa oblongifolia, Rumex obtusifolius.	1	Insecticidal
RUMEX PATIENTIA L.	herba, radix	Patience dock	2	Gastroprotective, antiulcerogenic, analgesic, antipyretic, anti-inflammatory, laxative.
RUMEX SANGUINEUS L.	radix	Redvein dock	1	
RUMEX SCUTATUS L.	folium	French sorrel, Buckler- leaved sorrel	1	
RUSCUS ACULEATUS L.	radix, rhizoma	Butcher' s broom	2	For chronic venous insufficiency, prevention varicose veins and hemorrhoids, potential treatment for orthostatic hypotension.
RUSCUS HYPOGLOSSUM L.	folium, rhizoma c. radicibus	Spineless butcher's-broom	2	Hemolytic , spermicidal efficacy and effect on vaginal mucosa.
RUTA GRAVEOLENS L.	oleum, herba c. floribus	Common rue	2	Potential anticancer, antiplatelet, cytotoxic, anti-venom, diuretic, sedative, analgesic, antirheumatic, potent cysticidal, antispasmodic, anti-inflammatory, anthelmintic. Poisoning, potential natural pesticides.
SABATIA ANGULARIS PURSH.	herba	Rose Pink, Bitterbloom	0	
SAGERAEA LAURIFOLIA BLATTER	folium		0	
SALIX PURPUREA L.	cortex	Purpleosier willow	1	
SALIX ALBA L.	cortex, folium	White willow	2	Migraine prophylaxis, treatment of back pain

SALIX CAPREA L.	cortex	Goat willow	2	Chemopreventive, antioxidant, anti-inflammatory.
SALVIA HISPANICA L.	fructus, radix	Chia	1	
SALVIA MILTIORHIZA BGE.	folium	Radix Salviae Miltiorrhizae	2	Antioxidant, myocardial protection, potent effect against HIV-1 integrase, anti-atherosclerotic, antileukemic, inhibition of platelet aggregation
SALVIA PRATENSIS L.	folium, summitas c. floribus	Introduced sage	2	Antioxidant, antimicrobial.
SALVIA SCLAREA L.	flos, herba c. floribus	Europe sage, Salvia sclarea	2	Antiproliferative and chemotherapeutic in human cancer, antimicrobial, antioxidant, anti-inflammatory, topical formulations for buccal mucosa, anticonvulsive
SAMBUCUS CANADENSIS L.	flos	Common elderberry, Sambucus caerulea, Sambucus orbiculata, Sambucus simpsonii., Sambucus nigra Canadensis	2	Antioxidant, chemopreventive, anti-inflammatory, antibacterial.
SAMBUCUS EBULUS L.	flos	Dwarf elderberry	2	Antioxidant, anticancer, anti-inflammatory, anti-arthritic, analgesic.
SAMBUCUS NIGRA L.	flos, cortex, folium		3	Anticancer, antioxidant, immune system activation, antiviral, diuretic, treatment of influenza A and B virus
SANGUISORBA MINOR SCOP.	herba	Small burnet	2	Antiviral, anti-HIV, acetylcholinesterase inhibition, antioxidant.
SANGUISORBA OFFICINALIS L.	herba, radix	Official burnet, Poterium officinale, Sanguisorba microcephala	2	Antiallergic, antioxidant, prevents chronic photodamage following UVB irrads., skin whitening agent, antimicrobial, anticancer, antithrombin, antiviral.
SANICULA EUROPAEA L.	folium, herba, radix	Wood Sanicle	2	Anti-influenza virus.
SANTALUM ALBUM L.	lignum		2	Anticancer, chemopreventive, antioxidant, antiviral against Herpes simplex.

SAPONARIA OFFICINALIS L.	folium, herba, radix	Bouncingbet, Lychnis saponaria	2	Cancer treatment.
SARRACENIA PURPUREA L.	folium, rhizoma	Purple pitcher plant, Side-saddle flower	1	
SASSAFRAS ALBIDUM NEES	cortex ex radicibus, radix, folium	Sassafras, Laurus albidus, Laurus sassafras	-1	Antifungal. Content of carcinogens and other toxic substances.
SATUREJA MONTANA L. S.L.	folium, herba c. floribus	Winter savory	2	Antioxidant, antiproliferative, antimicrobial, antifungal.
SATUREJA THYMBRA L.	herba c. floribus	Thyme-Leaved Savory	2	Antibacterial, antifungal, anthelmintic, insecticidal, analgesic, anti-inflammatory, antioxidant.
SAUSSUREA LAPPA CLARKE	radix	Saussurea costus	2	Anticarcinogenic, antifungal.
SAXIFRAGA GRANULATA L.	folium, radix	Meadow saxifrage	0	
SCHINOPSIS QUEBRACHO COLORADO BARK ET M.	lignum	Red quebracho, Loxopterygium lorentzii, Quebrachia lorentzii, Schinopsis lorentzii	2	Antitumoral, antimicrobial.
SCHINUS MOLLE L.	folium, fructus, resina	California pepper tree, molle, pepper tree, pepperina, Peruvian mastic tree, Peruvian peppertree, Peruvian pepper	2	Antidepressant, antibacterial, antioxidant, antifungal, cytotoxic for human hepatocellular carcinoma cells.
SCHISANDRA CHINENSIS BAILL.	folium	Kadsura chinensis	3	Anticancer, antioxidant, Inhibition of P-glycoprotein, adaptogen, tonic, treatment of acute nonspecific pneumonia, hepatoprotective
SCUTELLARIA BAICALENSIS GEOR	folium, radix	Baikal Skullcap, Scutellaria macrantha	2	Anticancer (anti-proliferative and apoptotic), antioxidant, anti-inflammatory, antiarteriosclerosis, antihypertensive.
SCUTELLARIA GALERICULATA L.	herba	Marsh skullcap, Scutellaria epilobiifolia	2	Antimicrobial, antihistaminic.

SCUTELLARIA LATERIFOLIA L	herba	Skullcap, Scullcap, Hoodwort, Quaker Bonnet, Helmet Flower, European Skullcap, Greater Skullcap, American skullcap, blue skullcap, blue pimpernel, hoodwort, hooded willow herb, side-flowering skullcap, mad dogweed, mad weed, helmet flower	2	Anxiolytic.
SECALE CEREALE		Cereal rye, Secale montanum Guss., Secale strictum, Triticum cereale	2	Treatment of benign prostatic hyperplasia.
SEDUM ACRE L.	folium	Gold-moss stonecrop, Wall-pepper, Yellow sedum	1	Antimicrobial.
SEDUM ALBUM L.	folium	White stonecrop, Oreosedum album	1	
SEDUM TELEPHIUM L.	folium	Live-forever, Witch's-moneybags, Hylotelephium telephiumsubsp. Telephium, Sedum purpureum, Sedum triphyllum	2	Antioxidant, photoprotective (against UVB-induced skin damage).
SELENICEREUS GRANDIFLORUS (L) BRITT ET ROSE	flos, herba	Queen of the night, Cereus grandiflorus, Selenicereus macdonaldiae	0	
SEMPERVIVUM TECTORUM L.	folium, herba	Houseleek	2	Antimicrobial, antinociceptive.
SEQUOIA GIGANTEA		Sequoiadendron giganteum, Giant sequoia, bigtree, Sierra-redwood	0	
SERENOA SERRULATA HOOK F.	fructus	Saw Palmetto, Sabal, Sabal serrulata, Serenoa repens, Sabal serrulatum	2	Treatment of benign prostatic hyperplasia, spasmolytic.

SESELI TORTUOSUM L.	fructus		2	Anti-inflammatory and antinociceptive.
SHITAKE		Lentinula edodes	2	Antifungal
SHOREA WIESNERI SCHIFF.	resina	Dammar (white)	0	
SIEGESBECKIA ORIENTALIS L.	folium, radix	The Holy Herb	2	Immunosuppressive, antiallergic, anticancer.
SILAUM SILAUS SHINZ ET THELL.	radix	Silaus flavescent., Silaus pratensis., Pepper Saxifrage	1	
SILYBUM MARIANUM GAERTN.	fructus, herba	Blessed milkthistle, Carduus marianus, Mariana mariana	3	Anticancer, antidiabetic, cardioprotective, hepatoprotective (normal bile secretion and anticholestatic properties), antioxidant and membrane stabilizing properties, anti-inflammatory, antiviral.
SIMABA CEDRON PLANCH.	semen	Cedron	2	Antimalarial.
SIMAROUBA AMARA AUBL.	cortex	Bitterwood	2	Antiamoebic, antimalarian, increases human keratinocyte differentiation.
SIMMONDSIA CHINENSIS NUTT.	oleum	Jjoba, Buxus chinensis, Simmondsia californica	2	Anti-inflammatory, weight loss.
SISON AMOMUM L.	fructus	Bastard Stone-Parsley	1	
SISYMBRIUM OFFICINALE SCOP.	folium, summitas c. floribus	Hedgemustard, Erysimum officinale, Sisymbrium officinale leiocarpum	1	
SIUM ERECTUM HUDS.	herba	Berula erecta, Cut-leaved water-parsnip, Low water-parsnip	1	
SIUM LATIFOLIUM L.	fructus, herba	Water Parsnip	1	
SIUM NINZI L.	radix		0	
SIUM SISARUM L.	herba	Skirret	1	

SMILAX ARISTOLOCHIAEFOLIA M.	radix	Mexican sarsaparilla	0	
SMILAX ASPERA L.	radix	Sarsaparilla, Smilax mauritanica	2	Antioxidant, antiproliferative, antimicrobial.
SMILAX CHINA L.	radix	China Root	2	Anticancer, anti-inflammatory, analgesic, antimicrobial, antimutagenic, antioxidant.
SMILAX FEBRIFUGA KUNTH.	radix	Ecuadorean sarsaparilla	0	
SMILAX MEDICA SCHLECHT ET C.	radix	Smilax aristolochiifolia, Cruz Sarsaparilla, Shot Bush, Rabbit Root	2	Antifungal
SMILAX OFFICINALIS H.B.K.	radix	Sarsaparilla	1	
SMILAX ORNATA LAMK.	radix	Smilax regelii	2	Antileprotic
SMILAX REGELII KILLIP ET MOR.	radix	Honduras sarsaparilla	2	Antimycotic, treatment of dermatophyte infections in man.
SMILAX UTILIS HEMSL.	radix		0	
SOY ISOFLAVONES			3	Therapeutic effects for breast and prostate cancers, postmenopausal syndrome, osteoporosis, and cardiovascular diseases.
SOLANUM MELONGENA L.	cortex, fructus	Eggplant	2	Anticarcinogenic, antiangiogenic, antioxidants, analgesic.
SOLIDAGO VIRGAUREA L.	herba c. floribus	Goldenrod, woundwort	2	Potential antitumor, potential use in the treatment of infectious diseases, promising antineoplastic, antioxidant, anti-inflammatory, antimicrobial, antifungal.
SORBUS AUCUPARIA L.	semen	European mountain ash, Rowan-berry, Pyrus aucuparia, Sorbus aucuparia var. xanthocarpa	2	Antimicrobial, antioxidant.
SORBUS DOMESTICA		Service Tree, Cornus domestica, Pyrus sorbus	2	Antioxidant.

SPATHYEMA FOETIDA RAF.	herba, radix, rhizoma	Symplocarpus foetidus, Dracontium foetidum, Skunk Cabbage	1	
SPERGULARIA RUBRA J. ET PRESL.	herba c. floribus	Red Sand Spurrey, Sandwort, Arenaria campestris, Arenaria rubra, Buda rubra	0	
SPIGELIA MARILANDICA L.	herba c. floribus, radix, rhizoma	Woodland pinkroot, Indian Pink	0	
SPILANTHES ACMELLA MURR. VAR. OLERACEA L.	herba c. floribus	Acmella oleracea, Spilanthes oleracea	3	Anti-aging (cosmetics). Characterization of convulsions induced by a hexanic extract of Spilanthes acmella var. oleracea in rats
SPIRULINA MAXIMA			2	Antioxidant, decrease vascular tone, potential hepatoprotective, chemopreventive agents, possible source of proteins in human alimentation.
STACHYS OFFICINALIS TREV.	herba, folium	Common hedgenettle, Betonica officinalis	1	Antiradical, antioxidant, antibacterial.
STACHYS RECTA L.	herba	Stiff hedgenettle	2	Antioxidant.
STACHYS SYLVATICA L.	herba	Whitespot	2	Antioxidant.
STELLARIA MEDIA VILL.	herba	Common chickweed, Alsine media, Stellaria apetala, Stellaria media var. procera	2	Antioxidant, anti-hepatoma.
STERCULIA URENS ROXB.	gummi	Indian-tragacanth	2	Antiviral.
STEVIA REBAUDIANA (BERTONI) HEMSLEY	folium	Stevia, sweetleaf, sweet leaf, sugarleaf	3	Antioxidant, antihypertensive, vasodilator, anti-inflammatory, immunomodulatory, antidiabetic (antihyperglycemic, insulinotropic, glucagonostatic), antiviral, bactericidal, gastroprotective, antitumoral, contraceptive, systemic and renal vasodilation, causing hypotension, diuresis and natriuresis

STYRAX BENZOIDES CRAIB.	balsamum, resina	Siam benzoin	1	
STYRAX BENZOIN DRYANDER	balsamum	Styrax	-1	Allergic contact dermatitis.
STYRAX OFFICINALIS L.	balsamum	Storax Tree	1	Hemolytic properties, poisoning sea fish.
STYRAX PARALLELONEURUM PERK.	balsamum	Sumatra benzoin (as Styrax benzoin)	1	
STYRAX TONKINENSIS CRAIS.	balsamum	Siam benzoin	2	Antiproliferative, antifungal.
SUCCISA PRATENSIS MOENCH.	flos, folium	Devilsbit, Scabiosa succisa	2	Antifungal.
SULFUR SUBLIMATUM ET LAVATUM	pulvis	Sublimed sulphur	3	Skin diseases. Irritant
SWERTIA CHIRATA BUCH. HAM.	herba, radix	Chiretta, Ophelia chirata, Swertia chirata.	2	Anthelmintic, antileishmanial, antihepatotoxic, antimalarial.
SWERTIA JAPONICA MAKINO	herba, radix		2	Gastroprotective, hepatoprotective, antimutagenic, antioxidant, hypoglycemic, anticholinergic.
SYRINGA VULGARIS L.	flos, folium, fructus, cortex	Common lilac	2	Hypotensive, antibacterial, anti-inflammatory.
SYZYGIUM AROMATICUM M. ET P.	essentia, folium, fructus	Clove	3	Antioxidant, anti-inflammatory, antimicrobial, antifungal, antiviral, apoptotic, chemopreventive, anesthetic, wound healing, anticonvulsivant, antiplatelet, hypoglycemic, aphrodisiac, inhibitor of growth and development of preimplantation embryo
SYZYGIUM CUMINI SKEELS	folium, fructus, cortex, semen	Java plum, Eugenia cumini, Eugenia jambolana, Syzygium jambolanum	3	Antidiabetic, antibacterial, analgesic, anti-inflammatory, antioxidant, astringent, gastroprotective, radioprotective, antifungal, antileishmanial, antiallergic, cytotoxic
SYZYGIUM JAMBOS ALSTON	flos, folium, fructus, cortex,	Malabar plum, Eugenia jambos, Jambosa jambos	2	Antioxidant, antidermatophytic, anti-Mycobacterium tuberculosis, antitumor.

	semen			
SYZYGIUM MALACCENSE M. ET P.	flos, folium, cortex,	Malaysian apple, <i>Eugenia malaccensis</i> , <i>Jambosa malaccensis</i>	1	
TABEBUIA AVELLANEDAE	cortex	<i>Tabebuia impetiginosa</i> , pink lapacho.	2	Anticancer, cytotoxic activity, antinociceptive, antiedematogenic, nitric oxide production inhibitor, antifungal activity.
TAGETES ERECTA L.	capitula	<i>Tagetes</i> , Marigold flower.	2	Anti-mutagenic, antioxidant, antimicrobial, insecticidal.
TAGETES MINUTA L.	flos, semen		2	Antitumor activity, antifungal, tranquilizing activity, hypotensive, bronchodilatory, spasmolytic, anti-inflammatory.
TAMARIX GALLICA L.	cortex, galla	Saltcedar, tamarisk, tamarix.	3	Chemopreventive, hepatoprotective effect (in cirrhotic patients), stimulant and tonic, antioxidant and antimicrobial activities.
TANACETUM CINERARIAEFOLIUM SCH. BIP.	capitula	Dalmation Pellitory.	1	
TANACETUM PARTHENIUM SCH. BIP.	capitula, herba c. floribus	Feverfew.	3	Anticancer (induce apoptosis in cancer cells), anti-angiogenic, anti-inflammatory, potential antimigraine effect, inhibition of human blood platelet aggregation, potential antithrombotic.
TANACETUM VULGARE L.	capitula, herba c. floribus, semen	Tansy, Common Tansy, Bitter Buttons, Cow Bitter, Mugwort, Golden Buttons.	2	Antitumor, anti-ulcerogenic, anti-inflammatory properties, diuretic, antibacterial activity. Potentially toxic (thiophenes compounds)
TARAXACUM OFFICINALE WEBER	herba c. radicibus, radix	Common Dandelion.	2	Potential anticancer, treatment of various ailments such as dyspepsia, heartburn, spleen and liver complaints, hepatitis and anorexia, antioxidant, for the treatment of hepatobiliary problems.

TECOMA CURIALIS			0	
TERMINALIA CHEBULA RETZ.	fructus	Black Myrobalan or Chebulic Myrobalan.	2	Anticancer, chemopreventive effect, cardioprotective, antioxidant, hepatocurative, anti-inflammatory, free radical scavenger, antibacterial, anti-herpes, antidiabetic, antimutagenic, probable radioprotector, antifungal.
TERMINALIA CITRINA ROXB.	fructus	Black chuglam, Citrine myrobalan.	2	Antioxidant (reduce the risk of chronic diseases, cardiovascular disease, and cancer), antimicrobial.
TERMINALIA BELLERICA ROXB.	fructus	Beleric, Myrobalan.	2	Potential antimutagenic/anticarcinogenic, anti-HIV-1, antimalarial, antifungal, anti-inflammatory, anti-hypersensitivity, antioxidant, antibacterial.
TEUCRIUM CRETICUM L.	herba, herba c. floribus		0	
TEUCRIUM MARUM L.	folium, summitas	Cat Thyme.	2	Antimicrobial and antioxidant activity.
TEUCRIUM MONTANUM L.	herba c. floribus	Mountain Germander.	2	Antimicrobial and free radical scavenger.
TEUCRIUM POLIUM L.	herba c. floribus	Felty Germander.	2	Antioxidant, antipyretic, hypolipidemic effects, diuretic, diaphoretic, tonic, antipyretic, antispasmodic and chologogic properties.
TEUCRIUM POLIUM L. SSP AUREUM ARCANGELI	herba	Teucrium luteum, Polium luteum, Teucrium flavicans	0	
TEUCRIUM POLIUM L. SSP CAPITATUM ARCANGELI	herba c. floribus	Felty Germander.	2	Hypoglycemic, hypolipidemic properties. Induced hepatitis.
TEUCRIUM SCORDIUM L.	herba c. floribus	Water Germander.	1	
TEUCRIUM SCORODONIA L.	herba	Woodland germander.	2	Anti-inflammatory (mastitis).

THALICTRUM FLAVUM L.	radix	Yellow Meadow-rue, Common Meadow-rue.	1	Antioxidant activity.
THLASPI ARVENSE L.	semen	Field Penny-cress.	2	Anti-HCV activities.
TILIA AMERICANA L.	cortex	Basswood, American Linden.	2	Anxiolytic and sedative effects.
TILIA CORDATA MILL.	folium	Small-leaved Lime, Small- leaved Linden.	2	Potential antitumoral, treatment of anxiety, antimicrobial, anti-genotoxicity.
TILIA PLATYPHYLLOS SCOP.	folium, cortex,	Large-leaved Linden, Large- leaved Lime.	1	Low scavenger.
TILIA TOMENTOSA MOENCH	flos, gemma	Silver lime, White Lime, Silver Linden.	2	Antimicrobial activity, anxiolytic.
TRACHYSpermum AMMI SPRAGUE	oleum, fructus, semen	Bishop's Weed.	1	Fungitoxic.
TRADESCANTIA ELONGATA GFW M.	folium		0	
TRAMETES SUAVEOLENS FR.	thallus	Polyporus suaveolens, Boletus suaveolen.	2	HIV-1 reverse transcriptase inhibitory activity.
TRIBULUS TERRESTRIS		Puncture Vine, Caltrop, Yellow Vine, Goathead.	2	Potential anticancer, treatment of impotency and urinary disorders, analgesic, diuretic and contractile effects antihypertensive and vasodilator, aphrodisiac, anti-diabetic.
TRIDAX PROCUMBENS L.	herba	Coatbuttons, Tridax daisy.	2	Hepatoprotective, immunomodulatory properties, antioxidant, depressed wound contraction.
TRIFOLIUM PRATENSE L.	flos, herba	Red Clover.	3	Chemopreventive, anticarcinogenic properties, sun-protective, estrogenic activity, treatment of menopause symptoms, stimulation of osteoblastic cell activity.
TRIGONELLA CAERULEA SER.	folium, herba c. floribus	Blue Fenugreek, Sweet Trefoil	1	

TRIGONELLA FOENUM-GRAECUM L.	semen	Fenugreek.	3	Potential cancer preventive agent, antineoplastic effect, antidiabetic, hypokalaemic, potential antiulcer, hypocholesterolemic, regulation of hyperthyroidism, antifertility, anti-inflammatory, immunomodulatory activity.
TRILISA ODORATISSIMA CAN.	folium	Vanilla Plant, Wild vanilla, deertongue, Carphophorus odoratissimus	1	
TRILLIUM ERECTUM L.	rhizoma	The Wake-robin, red trillium, purple trillium, Beth root or Stinking Benjamin.	0	
TRITICUM REPENS		Couch-Grass, Dog-grass.	2	Potent hypoglycemic activity, laxative.
TROPAEOLUM MAJUS L.	fructus, herba, semen	Garden nasturtium, Indian cress.	2	Anticancer properties, antithrombin activity.
TROPAEOLUM MINUS L.	fructus	Dwarf nasturtium	0	
TSUGA CANADENSIS CARR.	cortex, folium, resina, summitas	Canadian Hemlock, Eastern Hemlock.	2	Insecticidal activity.
TURNERA DIFFUSA WILLD.	flos, folium, summitas	Damiana	3	Modulates gastric emptying, anti-hyperglycemic effect, anti-stress, memory enhancement, increased physical and/or sexual performance.
ULMUS CAMPESTRIS		Elm	2	Wound healing promoter
ULMUS FULVA MICHX.	cortex, folium	Slippery elm, American Elm, Elm, Indian Elm, Japanese Elm, Moose Elm, Red Elm, Sweet Elm, Ulmus rubra, Winged Elm.	3	Possible use for breast cancer, anti-diarrhea.
ULMUS MINOR MILLER	cortex, flos, folium	Field Elm	1	

ULMUS RUBRA MUHL.	cortex	Slippery elm	2	Possible anticancer activity, antioxidant, peroxynitrite scavenger.
UMBILICUS ERECTUS DC	folium, herba		0	
UMBILICUS HORIZONTALIS DC	folium, herba	Cotyledon horizontalis, Umbilicus gaditanus, Umbilicus intermedius	0	
UMBILICUS RUPESTRIS DANDY	folium, herba	Cotyledon umbilicus-veneris, Umbilicus pendulinus	1	
UNCARIA GAMBIR ROXB.	extractum siccum, folium, summitas	Gambier, Cat's Claw.	2	Antibacterial activity.
UNCARIA RHYNCOPHYLLA MIQ.	succus		2	Anticonvulsive and free radical scavenger.
USNEA BARBATA L. S.L	thallus		2	Anti-inflammatory and antimicrobial activity.
USNEA PLICATA WIGGERS	thallus	Lichen plicatus	0	
VACCINIUM MACROCARPON AITON	folium	Cranberry	3	Anti-inflammatory, antiviral, antioxidant, antiulcerogenic, antilithogenic, treatment of primary fibromyalgia, urinary tract infections, calcium oxalate urolithiasis, atherosclerosis and cardiovascular diseases. Interaction with warfarin
VACCINIUM MYRTILLUS L.	folium	Bilberry, blaeberry, whortleberry, whinberry (or winberry), myrtle blueberry.	3	Chemoprotective, anti-platelet aggregation, anticancer properties, cardioprotectant, inhibition of Helicobacter pylori, antiulcer activity, protecting genomic integrity, antiviral, angiogenesis activity, antidiabetic, antioxidant.
VACCINIUM ULIGINOSUM L.	folium	Bog bilberry.	2	Antimicrobial activity, depressive effect on elevation of postprandial blood glucose.

VACCINIUM VITIS-IDAEA L.	flos, folium	Lingonberry or cowberry, also called foxberry, mountain cranberry, lowbush cranberry, and partridgeberry.	2	Chemopreventive activities, anti-HSV-2 activity, antioxidant, anti-inflammatory, antimicrobial.
VALERIANA CELTICA L.	radix	Celtic Spikenard	1	
VALERIANA OFFICINALIS L.	radix, rhizoma	Valerian	3	Cytotoxicity, neuroprotective, hypnotic activity, anxiolytic.
VALERIANA OFFICINALIS L. SSP SAMBUCIFOLIA	radix		1	
VALERIANA PHU L.	radix		1	
VATERIA INDICA L.	resina	Copal tree, Piney varnish tree, White dammar tree, Malabar white pine, Indian copal tree, Safed damar.	2	Anticancer activity.
VERBASCUM DENSIFLORUM BERT.	flos, folium, herba c. floribus	Mullein	2	Cause of dermatitis.
VERBASCUM NIGRUM L.	flos	Dark Mullein.	1	
VERBASCUM PHLOMOIDES L.	flos, folium, herba c. floribus	Wooly Mullein	1	
VERBASCUM THAPSUS L.	flos, folium, herba c. floribus	Common mullein.	3	Antiviral activity (herpesvirus type 1), treat pulmonary problems, inflammatory diseases, asthma, spasmodic coughs, diarrhea, headaches, antihyperlipidemic activity, for ear pain, anti-hepatoma activity.
VERBENA ODOROSA		Lippia citriodora, Aloysia citriodora, Aloysia triphylla, Lippia triphylla, Verbena triphylla, Verbena citriodora, Zappania citrodora, Lemon verbena, Lemon beebrush	2	Antioxidant activity, anti-inflammatory, antimicrobial, antimycotic.

VERBENA OFFICINALIS L.	herba c. floribus	Vervain.	2	Antioxidant, antiradical efficacy, antimicrobial, treatment of inflammatory disorders, skin burns, abrasions, and gastric diseases.
VERONICA ALLIONI F.W. SCHMIDT	herba	Breckland speedwell, Veronica praecox allioni	0	
VERONICA ANAGALLIS-AQUATICA L.	folium	Water Speedwell.	2	Antinociceptive and anti-inflammatory activities.
VERONICA AUSTRIACA L. SSP TEUCRIUM WEBB	herba c. floribus	Hungarian speedwell.	0	
VERONICA BECCABUNGA L.	folium	Water Pimpernel. Becky Leaves. Cow Cress. Horse Cress. Housewell. Grass. Limewort. Brooklembe. Limpwort. Wall-ink. Water-Pumpy.	1	
VERONICA CHAMAEDRYS L.	herba c. floribus	Germander Speedwell.	1	
VERONICA OFFICINALIS L.	herba c. floribus	Common Speedwell.	2	Anti-ulcerogenic and hypocholesterolaemic effect.
VETIVERIA ZIZANIODES NASH.	radix	Vetiver grass, Andropogon zizanioides.	1	
VICIA FABA L.	herba c. floribus	Broad bean, fava bean, faba bean, horse bean, field bean, tic bean, foul.	3	Prevent the cancer, treatment of Parkinson's disease, mitogenic activities, radical scavenger effect, antioxidant, anti-hypercholesterolemic, anti-mitogenic, coronary heart disease, obesity, diabetes mellitus. Erythroagglutinating activity.
VIOLA CANINA L.	flos	Heath Dog-violet, Heath Violet.	0	
VIOLA ODORATA L.	flos, folium, rhizoma	Sweet Violet	2	Potential anticancer, anti-inflammatory activity, oral antipyretic activity.

VIOLA TRICOLOR L. S.L.	flos	Wild pansy, Johnny Jump Up.	2	Containing uteroactive peptides, antimicrobial activity, antitussives, cholagogues, dermatological medicines, roborants, tonics, anti-phlebitis remedies.
VISCUM ALBUM L.	folium, herba	Korean mistletoe, Mistletoe, Iscador	3	Antitumoral, immunomodulating adjuvant in tumor therapy, antioxidant, anti-hypercholesterolemic, coronary vasodilator, potential therapeutic for chronic hepatitis C
VITEX AGNUS-CASTUS L.	folium, fructus, radix	Vitex, Chaste Tree, Chasteberry, Monk's Pepper.	3	Antitumor activity, treatment of menopausal and premenstrual symptoms, anti-androgenic effect, anti-hyperprolactinemic, anti-acne, anti-inflammatory and neuroprotective effect.
VICIA ERVILIA WILLD.	semen	Bitter Vetch.	0	
WITHANIA SOMNIFERA DUNAL.	radix	Ashwagandha, Indian ginseng, Winter cherry, Ajagandha, Kanaje Hindi, Sann Al Ferakh	3	Anticancer, anti-inflammatory, hepatoprotective, cyclooxygenase (COX) inhibitory activity, antineoplastic, anti-inflammatory, antistress, antidepressant, antioxidant, immunomodulatory, hemopoietic, rejuvenating properties, compensate neuronal damaged.
WRIGHTIA ZEYLANICA R. BR.	cortex, semen	Wrightia antidysenterica	0	
XERANTHEMUM ANNUUM L.	flos	Pink everlasting, Immortelle.	1	
YUCCA FILAMENTOSA L.	herba	Adam's needle	1	
ZANTHOXYLUM ACANTHOPODIUM DC	cortex, fructus	Andaliman fruit.	1	
ZANTHOXYLUM AMERICANUM MILL.	cortex, fructus	Common pricklyash, prickly ash, angelica tree, angelica tree of America, northern prickly ash, suterberry, toothache tree, yellow wood.	2	Cytotoxicity to human tumor cells, antifungal,

ZANTHOXYLUM ARMATUM DC	cortex, fructus		1	Repellent properties
ZEA MAYS L.	stigmata	Maize, Corn	3	Anti-diarrhoea, nutritional product
ZIZIPHUS JUJUBA MILLER	cortex, folium	Suanzaoren, Jujube, Ziziphus sativa, Ziziphus vulgaris, Ziziphus zizyphus	2	Hypoglycemic, sedative and hypnotic effects, whitening agents for UV-sensitive skin, chemopreventive agent against Alzheimer's disease, anticancer, antioxidant, antimicrobial, hypotensive

Notes. For plants evidenced in red, no informations were found. In the "Pharmacological properties" column, adverse effects were pointed out in red.

Ranking	Number
-1	5
0	120
1	206
2	505
3	156
Total	992

LIST OF PLANTS WITH ANTIINFLAMMATORY PROPERTIES

Rank 0

ALETRIS FARINOSA L.

Rank 1

CIBOTIUM BAROMETZ J.SM.

COPTIS TRIFOLIA SALISB.

GALIUM CRUCIATA SCOP

GAULTHERIA PROCUMBENS L.

GNAPHALIUM ULIGINOSUM A. RICH

LINARIA VULGARIS MILL.

MELITTIS MELISSOPHYLLUM L.

Rank 2

ACACIA FARNESIANA WILLD.

ACACIA NILOTICA WILLD EX DEL.

ACHILLEA AGERATUM L.

ACHILLEA MILLEFOLIUM L.

ACHRAS SAPOTA L.

ADANSONIA DIGITATA L.

ADHATODA VASICA NEES

AEGLE MARMELOS CORREA

AESCULUS HIPPOCASTANUM L.

AFRAMOMUM MELEGUETA K. SCHUM.

AGAVE AMERICANA L.

ALISMA ORIENTALE JUZEP.

ALISMA PLANTAGO AQUATICA L.

ALOE FEROX MILL.

ALOE PLICATILIS MILL.

AMOMUM XANTHIODES WALLICH

ANACARDIUM OCCIDENTALE L.

ANGELICA SINENSIS DIELS.

ANNONA MURICATA

ANNONA RETICULATA L.

ANTHRISCUS SYLVESTRIS HOFFM.

ARTEMISIA DRACUNCULUS

ARTOCARPUS ALTILIS FOSBERG

ASPARAGUS OFFICINALIS L.

AURICULARIA AURICULA-JUDAE B.

BALANITES AEGYPTIACA DEL.

BAROSMA BETULINA BART ET WEN

BAROSMA CRENULATA HOOK

BAROSMA SERRATIFOLIA WILLD.

BERBERIS VULGARIS L.

BOSWELLIA CARTERII BIRDW.

BRUNFELSIA HOPEANA BENTH.

BUPLEURUM ROTUNDIFOLIUM L.

BURSERA GUMMIFERA ENGL.

CALLUNA VULGARIS HULL.

CALOPHYLLUM INOPHYLLUM L.

CARISSA CARANDAS L.
 CARTHAMUS LANATUS L.
 CASSIA ITALICA F.W. ANDR.
 CATALPA BIGNONIOIDES WALT.
 CEIBA PENTANDRA GAERTN.
 CENTAUREA CYANUS L.
 CETRARIA ISLANDICA ACH.
 CITRUS LIMONUM
 CLITORIA TERNATEA L.
 COMBRETUM MICRANTHUM DON.
 COMMIPHORA MOLMOL ENGL.
 COMMIPHORA MYRRHA ENGL.
 COPAIFERA LANGSDORFII DESF.
 CORDIA MYXA L.
 CURCUMA ZEDOARIA ROSC.
 CYMBOPOGON MARTINI WATS
 CYPERUS ROTUNDUS L.
 DACTYLIS GLOMERATA L.
 DRIMYS WINTERI FORST.
 DROSER A ROTUNDIFOLIA L.
 EPILOBIUM ANGUSTIFOLIUM L.
 EPILOBIUM PARVIFLORUM
 ERYNGIUM CAMPESTRE L.
 FICUS CARICA L.
 FICUS ELASTICA ROXB.
 FILIPENDULA ULMARIA MAX.
 FRAXINUS EXCELSIOR IUS L.
 GEUM RIVALE L.
 GEUM URBANUM L.
 HEDYCHIUM CORONARIUM KOENIG
 HIERACIUM PILOSELLA L.
 HYGROPHILA AURICULATA HEINE
 HYMENAEA COURBARIL L.
 HYPTIS SUAVEOLENS POIT.
 ISATIS TINCTORIA L.
 JUSTICIA PECTORALIS JACQ.
 LAMINARIA DIGITATA LMX
 LAVANDULA LATIFOLIA MEDIC.
 LAWSONIA INERMIS L.
 LIPPIA CITRIODORA KUNTH
 LITSEA CUBEBA PERS.
 LIPPIA DULCIS TREV.
 LITCHI CHINENSIS SONNER
 LOBARIA PULMONARIA HOFFM.
 LONICERA JAPONICA THUNB.
 LYCOPODIUM CLAVATUM L.
 LYTHRUM SALICARIA L.
 MAGNOLIA OFFICINALIS REHDER
 MANGIFERA INDICA L.
 MARRUBIUM VULGARE L.
 MELALEUCA LEUCADENDRON L. VAR. VIRIDIFLORA

MENYANTHES TRIFOLIATA L.
 MICHELIA CHAMPACA L.
 MORINDA OFFICINALIS HOW.
 MORUS ALBA L.
 MYRISTICA FRAGRANS HOUTT.
 OPHIOPOGON JAPONICUS KER-GAW.
 PANAX PSEUDOGINSENG WALL.
 PASSIFLORA EDULIS SIMS .
 PELARGONIUM GRAVEOLENS L 'HERIT
 PEUCEDANUM OSTRUTHIUM KOCH.
 PEUMUS BOLDUS MOLINA
 PHILLYREA LATIFOLIA L.
 PHYSALIS PERUVIANA L.
 PINUS SYLVESTRIS
 PIPER BETLE L .
 PIPER CUBEBA L.F.
 PISTACIA TEREBINTHUS L.
 PLANTAGO MAJOR L.
 POTENTILLA ERECTA RAUSCHEL
 PROTIUM HEPTAPHYLLUM MARCH.
 PTEROCARPUS SANTALINUS L. F.
 PULMONARIA OFFICINALIS L.
 QUERCUS INFECTORIA OLIV.
 RHEUM UNDULATUM L.
 RHUS AROMATICA AITON
 RIBES RUBRUM L.
 RUBIA CORDIFOLIA L.
 RUBUS IDAEUS L.
 RUMEX PATIENTIA L.
 RUTA GRAVEOLENS L.
 SALIX CAPREA L.
 SALVIA SCLAREA L.
 SAMBUCUS CANADENSIS L.
 SAMBUCUS EBULUS L.
 SATUREJA THYMBRA L.
 SCUTELLARIA BAICALENSIS GEOR
 SESELI TORTUOSUM L.
 SIEGESBECKIA ORIENTALIS L.
 SIMMONDSIA CHINENSIS NUTT.
 SMILAX CHINA L .
 SOLIDAGO VIRGAUREA L.
 SYRINGA VULGARIS L.
 TERMINALIA CHEBULA RETZ.
 TERMINALIA BELLERICA ROXB.
 TEUCRIUM SCORODONIA L.
 USNEA BARBATA L. S.L
 VACCINIUM VITIS-IDAEA L.
 VERBENA ODOROSA
 VERBENA OFFICINALIS L.
 VERONICA ANAGALLIS-AQUATICA L.
 VIOLA ODORATA L.

Rank 3

ALTHAEA OFFICINALIS L.
ANDROGRAPHIS PANICULATA NEES
ARCTIUM LAPPA L.
ARNICA MONTANA L.
ARONIA MELANOCARPA
ARTEMISIA CAPILLARIS THUNB.
ASTRAGALUS MEMBRANACEUS BUNG.
BERBERIS ARISTATA DC
CALENDULA OFFICINALIS L.
CAPSICUM ANNUUM L.
CASSIA ANGUSTIFOLIA VAHL.
CHAMAEMELUM NOBILE ALL.
CHRYSANTHELLUM AMERICANUM
CHRYSANTHELLUM AMERICANUM VATKE
CIMICIFUGA RACEMOSA NUTT.
CITRUS AURANTIUM
COMMIPHORA MUKUL HOOK
CRATAEGUS MONOGYNA JACQ.
CROCUS SATIVUS
CURCUMA LONGA L
CURCUMA XANTHORRHIZA ROXB.
ECHINACEA PALLIDA BRITTON
EUCALYPTUS CITRIODORA HOOK
GYNOSTEMMA PENTAPHYLLUM
HAMAMELIS VIRGINIANA L.
HARPAGOPHYTUM PROCUMBENS DC
HEDERA HELIX L .
HYPERICUM PERFORATUM L.
HYPPOPHAE RHAMNOIDES
LAMIUM ALBUM L .
MELALEUCA ALTERNIFOLIA CHEEL
OCIMUM BASILICUM
OPUNTIA FICUS-INDICA MILL.
ORIGANUM VULGARE
PAEONIA LACTIFLORA PALL.
PANAX GINSENG C.A. MEYER
PANAX NOTOGINSENG CHEN.
PERILLA FRUTESCENS
PFAFFIA PANICULATA
PHYLLANTHUS AMARUS
PHYLLANTHUS EMBLICA L.
PHYLLANTHUS NIRURI L.
PICRORHIZA KURROA ROYLE
PIMENTA RACEMOSA MOORE
PIPER LONGUM
PLANTAGO ARENARIA POIRET
PLANTAGO LANCEOLATA L.
POLYGONUM AVICULARE L.
POLYGONUM CUSPIDATUM

POLYGONUM MULTIFLORUM THUNB.
 POLYPODIUM CALAGUALA RUIZ.
 PRUNELLA VULGARIS L.
 PSIDIUM GUAJAVA L.
 PTEROCARPUS MARSUPIUM ROXB.
 PUNICA GRANATUM L.
 PYROLA ROTUNDIFOLIA L.
 RHEUM OFFICINALE BAILL.
 RHEUM PALMATUM L. VAR. TAGUNTICUM MAXIM
 SILYBUM MARIANUM GAERTN.
 STEVIA REBAUDIANA (BERTONI) HEMSLEY
 SYZYGIUM AROMATICUM M. ET P.
 SYZYGIUM CUMINI SKEELS
 TANACETUM PARTHENIUM SCH. BIP.
 TRIFOLIUM PRATENSE L.
 TRIGONELLA FOENUM-GRAECUM L.
 VACCINIUM MACROCARPON AITON
 VERBASCUM THAPSUS L.
 VITEX AGNUS-CASTUS L.
 WITHANIA SOMNIFERA DUNAL.

Ranking	Number
Rank 3	69
Rank 2	138
Rank 1	7
Rank 0	1
Total	215