

A case of occupational airborne allergic contact dermatitis caused by faveira amargosa, a tropical timber

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doi:10.1111/j.1600-0536.2012.02014.x

Key words: airborne contact dermatitis; contact allergy; faveira amargosa; gele kabbes; Leguminosae; occupational; tropical timber; wood dust.

Although sawdust of tropical woods may be irritating to the skin, eyes, nose, and lungs, and in addition can cause sensitization, relatively few cases of occupational contact dermatitis caused by tropical woods have been reported in the medical literature.

Case Report

A 44-year-old male, working for 22 years as a sawyer in his own factory where imported tropical hardwoods are sawed and carved, presented with a 3 yr

history of a progressive dermatitis during the working week, initially localized on the face and hands, but spreading over his whole body during the week. At weekends and during holidays, the steroid responsive dermatitis faded. Working with faveira amargosa aggravated the dermatitis. His co-workers did not suffer from these symptoms. Local treatment with 0.1% mometasone ointment temporarily relieved the dermatitis.

Patch testing with freshly carved faveira amargosa wood (10% wood dust by weight in pet.) and three other woods that our patient regularly encountered (sapupira, beech, and guariuba) showed a 3+ reaction only to faveira amargosa. Eleven healthy controls showed no reaction to faveira amargosa in patch testing. In addition, 15 other

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Conflicts of interest: The authors have no conflict of interest. Funding: None

species of wood were patch tested on the patient, and none gave a positive result.

Our patient stopped importing and processing faveira wood, but he still suffered from a mild itchy dermatitis. This was presumably attributable to the use of faveira amargosa in plywood, which is still processed in his factory.

Discussion

Faveira amargosa (*Vatairea guianensis*) is a common name for an inexpensive tropical wood from Latin America, and is used for the production of strip parquet, indoor and outdoor woodwork, wall cladding, furniture, pallets, crates, and plywood. Other local names for this tropical timber are faveira amarela, angelim amargoso, fava amargosa, fava bolacha, faveira bolacha, angelim araroba (Brazil), maqui (Colombia), inkassa, yongo (French Guyana), arakaka, arisauro (Guyana), amargo (Honduras and Panama), and gele kabbes (Suriname).

Faveira amargosa is a member of the Leguminosae family. Other members of this family, such as *Dalbergia* (rosewood, palissander, and cocobolo), are notorious sensitizers (1, 2).

In the case of sawdust, allergic contact dermatitis typically begins in an airborne pattern, affecting those body parts that are exposed to fine sawdust. Later, the eruption spreads to areas where the dust is trapped (axillae and groin) (3, 4). Although allergens in tropical wood are mostly benzoquinones and naphthoquinones (1), the exact allergen of faveira is still unknown.

Trade names of tropical hardwoods are often not unequivocal (one trade name can refer to different botanical species). In addition, for one botanical species, many local names are used. Therefore, it is often very difficult to assess the exact botanical identity of the culprit.

Despite the fact that tropical wood is intensively processed mainly in South American countries, some of which are developing countries, only a few case reports of allergic reactions have been reported. A lower priority for contact allergy might contribute to this small number of case reports. Nevertheless, because of the high potential for sensitization, we need to be aware of contact dermatitis caused by tropical woods in all exposed populations.

Airborne contact dermatitis caused by wood dust of faveira amargosa has, to the best of our knowledge, not been reported previously.

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