

# Health and Safety

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## Skin Problems

Nursery workers can develop a variety of different skin ailments, including rashes and minor swelling. Pesticides are often blamed for these symptoms, but plants themselves and exposure to the sun are often contributing factors. In medical terminology, these skin problems are called dermatitis, of which there are three kinds:

### **1. Primary irritant dermatitis (PID)**

This is caused by chemicals that directly irritate the skin. The symptoms can range from redness or itching, to blisters or peeling; the areas of direct contact are usually the most affected. A number of different agronomic crops and weeds, including tomatoes and milkweed, can cause PID, as well as some commonly-used nursery pesticides such as: captan, benomyl, chlorothalonil, and glyphosate. Treatment consists of washing the affected area and preventing further contact with the irritant by wearing gloves and long-sleeve clothing.

### **2. Allergic Contact Dermatitis (ACD)**

In this disorder, the skin becomes sensitized to the chemical over time and then an allergic reaction occurs. Characteristic ACD symptoms include rashes, itching and blisters and the most wellknown allergenic plants are poison ivy and poison oak. Other plants including cedar, pine, and liverworts can also cause ACD in sensitive individuals as can nursery pesticides including captan, benomyl, malathion and thiram. Treatment consists of thorough washing to remove the allergen, followed by topical skin creams to reduce the symptoms.

### **3. Photosensitive Dermatitis**

This condition occurs when a plant chemical gets on the skin and then exposure to the sun causes a local irritation. Symptoms include redness, blisters, and hyperpigmentation of the affected area. Horticultural crops such as figs, limes, mustard, and Klamath weeds have been associated with this disorder.

All these skin conditions are easier to prevent than to cure. Gloves and long sleeves prohibit the chemical from contacting the skin, and so should be worn when working with pesticides or problem plants. Some people are more sensitive than others, and treatment is much more effective when skin problems are identified early. So be sure to inform nursery workers, especially new employees, of the symptoms and preventative measures.

It would be interesting to know more about forest and conservation species that can cause skin problems. Hal Wells of the California Dept. of Forestry Ben Lomond Nursery reports that some of his workers are affected by Scotch pine and I have observed sensitivity to spruce seedlings. If you'll share your experiences, I'll pass them along in the next issue of FNN.

#### **Source:**

Craigmill, A. Plants, pesticides and other toxic chemicals: cutaneous toxicity (toxic effects on skin). PAPA (Pesticide Applicators Professional Association) Applicators News 8(1): 6-7, January, 1993.