

RESIDENT ROUNDS: PART II

Plants Causing Allergic Contact Dermatitis

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Plants are frequently implicated in skin disease, especially allergic and irritant contact dermatitis. The following chart is composed of plants that are often associated with skin disease and the facts about them that are commonly encountered on board examinations.

Plants Associated With Skin Disease*					
Plant Name	Family	Inciting Agent	Cross Reactivity	Reaction Type	Extra
Posion Ivy	Anacardiaceae (Toxicodendron genus)	Pentadecylcatechol in Oleoresin (Urushiol)	Mango (peel), Cashew, Ginko, Japanese lacquer tree, Brazillian pepper tree	ACD, black-spot reaction	Black-spot test (urushiol turns black on white paper (indicates toxic anacardiaceae) ¹
Posion Oak	Anacardiaceae (Toxicodendron genus)	Pentadecylcatechol in Oleoresin (Urushiol)	Mango (peel), Cashew, Ginko, Japanese lacquer tree, Brazillian pepper tree	ACD, black-spot reaction	P. Ivy, Oak, and Sumac can cause Erythema Multiforme s/p allergic contact dermatitis ²
Posion Sumac	Anacardiaceae (Toxicodendron genus)	Pentadecylcatechol in Oleoresin (Urushiol)	Mango (peel), Cashew, Ginko, Japanese lacquer tree, Brazillian pepper tree	ACD, black-spot reaction	
Peruvian Lily (Alstromeria)	Alstroemeriaceae and Liliaceae	Tuliposide A		ACD	Nitrile gloves protect; polyvinyl do not protect ³
Myroxylon balsamum	Alstroemeriaceae and Liliaceae	Balsam of Peru	Turpentine, colophony, benzoin, wood tars, spices (cinnamon, clove, vanilla, curry)	ACD	
Pinus palustris tree	Alstroemeriaceae and Liliaceae	Colophony	Rosin, medications, mascara, adhesives, bandages, varnish, wax, paper products, dental cement	ACD	
Ginkgo	Alstroemeriaceae and Liliaceae	Ginkgo fruit pulp	Rhus, cashew	ACD, ICD	Only seed covering causes ACD ²
Ragweed	Asteraceae (Compositae)	Sesquiterpene lactones		ACD, allergic rhinitis	ACD during growing season; rhinitis during pollen season ²
Pyrethrum	Asteraceae (Compositae)	Sesquiterpene lactones		ACD	

Plant Name	Family	Inciting Agent	Cross Reactivity	Reaction Type	Extra
Chrysanthemum	Asteraceae (Compositae)	Sesquiterpene lactones		ACD	Most common cause of SQL allergy (Family often presents in airborne contact distribution) ⁴
Feverfew	Asteraceae (Compositae)	Sesquiterpene lactones		ACD	Common to screen for SQL allergy with extract ⁴
Artichoke	Asteraceae (Compositae)	Sesquiterpene lactones		ACD	
Onions	Alliaceae	Diallyl disulfide, allylpropyl disulfide, allicin		ACD, Urticaria	Rare to cause dermatitis. Reusable gloves do not protect sensitized patients from reexposure of onion or garlic ²
Garlic	Alliaceae	Diallyl disulfide, allylpropyl disulfide, allicin		ACD, ICD, Urticaria	ICD caused by Thiocyanates (bulb)/ Common cause of fingertip dermatitis in cooks ²
Chive	Alliaceae	Diallyl disulfide, allylpropyl disulfide, allicin		ACD, Urticaria	
Primrose (Primula obconica)	Primulaceae	Primin			

Sources:

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FIGURE 1. Pinus Palustris Tree**FIGURE 2.** Poison Sumac**FIGURE 3.** Poison Ivy/Poison Oak

FIGURE 4. Chrysanthemum



FIGURE 5. Feverfew



FIGURE 6. Ragweed



FIGURE 7. Primrose



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DISCLOSURES

None of the authors have declared any relevant conflicts.

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