

## Senecio madagascariensis

### Madagascar ragwort, Madagascar fireweed, variable groundsel

*Senecio madagascariensis* Poiret

Family: Asteraceae

**Description:** Low, upright, branched herb to 2 ft tall. Leaves smooth, narrow, up to 5 inches long by 1 inch wide, alternate, entire or lobed, margins serrated. Flowers profusely, 0.75 inches diameter, daisy-like flowers, each with 13 petals, disc and petals bright yellow, matures into thistle ball which quickly blows away in the wind. Each flower is capable of producing 150 long-lived seeds and each plant can produce 30,000 seeds<sup>(67)</sup>. *Senecio* is derived from the Latin *senex*, old man, for the white thistles<sup>(70)</sup>; *madagascariensis*, of Madagascar<sup>(69)</sup>. The reason for the common name “fireweed” in Australia is uncertain. It has been speculated that it was due to its rapid spread, or the fact that it colonizes burnt-out areas, or that it causes spontaneous combustion in alfalfa hay, or because of its bright yellow color<sup>(67)</sup>. The Weed Science Society of America, to bring more consistency to weed names, has adopted “Madagascar ragwort” as the common name for this weed. “Fireweed” is a very frequently used common name and is generically meaningless. “Ragwort” is a traditional name for some members of the genus *Senecio*, as is “groundsel.”

**Distribution:** Native to Madagascar and southern Africa. A serious pasture problem in Queensland and New South Wales, Australia. Also a problem in Argentina and Kenya<sup>(67)</sup>. First observed in North Kohala by Parker Ranch personnel about 1985, from whence it spread southward toward and beyond Kamuela. Infestations occur in pastures along the Saddle Road and, apparently spread by a shipment of cattle, in Ka‘ū. It is spread by wind, vehicles, and the transfer of cinder and soil and of livestock from contaminated areas. Homes and ranchlands in Kona are infested. An infestation was found at Halfway Bridge on Kaua‘i on a road cut that was hydro-mulched, apparently with contaminated grass seed, in the late 1980s. HDOA has since been conducting an intensive control program to eradicate that infestation. The Pukalani-Makawao area of Maui is heavily infested.



**Environmental impact:** Ragwort is toxic (pyrrolizidine alkaloids) to cattle and horses, and although sheep and goats are somewhat tolerant, they can become ill or be killed by grazing too much fireweed<sup>(71)</sup>. Although fireweed poisoning of livestock in Hawai‘i is not apparent so far, because cattle and horses will not normally graze the weed, it may become a problem in times of feed shortages, as ragwort displaces grasses and retains the toxins even after drying<sup>(1, 71)</sup>.

**Management:** Resting pastures is reported by rancher Pono Von Holt to control ragwort in his pastures in Kohala. Ragwort can be controlled by grazing by sheep and goats, but too high a diet of fireweed will cause illness or death of these animals<sup>(71)</sup>. Very susceptible to 2,4-D, dicamba, MCPA, metsulfuron, and triclopyr when young and succulent. Susceptible to glyphosate, although only application with wipe-on applicators to taller ragwort is possible to avoid injury to the pasture species. Mature ragwort susceptible to MCPA at 2 lb/acre, clopyralid at 0.5 lb/acre. Tebuthiuron at 2 lb/acre effective. HDOA is evaluating biocontrol agents for controlling ragwort. Follow-up sowing of forage seed is recommended to reclaim the site and compete with regenerating ragwort. Continued monitoring is needed to control newly emerging seedlings before seed set<sup>(61)</sup>.