NRCS Natural Resources Conservation Service

Invasive Species Fact Sheet

Pacific Islands Area – West

Siam weed *(Chromolaena odorata)*

Scientific name & Code: ***Chromolaena odorata*** (L.) R.M. King & H. Robinson, CHOD

Synonyms - *Eupatorium odorataum* L.

Family: Asteraceae (sunflower family)

Common names: English – Siam weed, Jack in the bush, Chromolaena, Bitter bush, Christmasbush, devil weed
Chamorro – Masigsig

Origin: Tropical America

Description: Perennial herb, subshrub, or shrub with long rambling branches. Leaves opposite, velvety to slightly hairy, sharp-tipped, delta to oval shaped with 3 nerves, and 1-5 coarse teeth along leaf edges. Flowers in many heads at the end of stalks, trumpet-shaped pale purple to off-white flowers above pale bracts with green nerves, 20-30 or more to a group. Flowers in the winter at the start of the dry season. Seeds (achenes) have dull white hairs (5 mm long).

Propagation: Primarily wind-dispersal of seeds, but can propagate vegetatively from stems and root fragments. Seeds can cling to hair, clothing, and shoes. The tiny seeds occur as contaminant in imported seed. Seed production is prolific but seed longevity in the soil is little more than 3 weeks.

Distribution: Common in many tropical areas as a weed. Identified on Agrigan, Aguijan, Pagan, Rota, Saipan, Tinian, & Guam.

Habitat / Ecology: Grows on many soil types but prefers well-drained soils, does not tolerate shade and thrives in open areas. Grows in croplands, pastures, forest margins, river flats, and disturbed rainforests.

Environmental impact: Forms dense stands that prevent establishment of other species. It is a strong competitor and had a toxic effect to other plant species (allelopathic). Establishes in disturbed areas and is a dry flashy fuel when dry, which promotes wildfires.

Management: Physical – Manual slashing, mechanical cutting (brush cutter or tractor-drawn implements). Concerns are limited access for mechanical equipment and labor costs of manual treatment. Slashing causes rapid regeneration unless followed by other methods; needs to be suppressed over an extended period.

Chemical – Herbicide application with Triclopyr at the seedling stage or on early regrowth. Concerns are high cost of chemicals, ecological concerns, and non-compatibility with cropping.

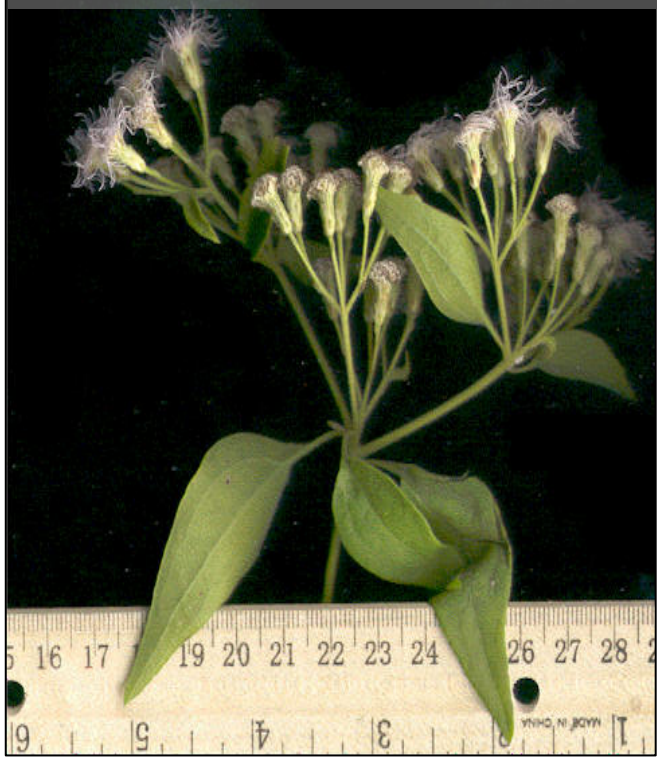
Biological – The biological control agent *Pareuchaetes pseudoinsulata* (Arctiidae – tiger moths) has been introduced into Guam and Saipan with encouraging results (defoliates pure stands). The insect *Cecidochares connexa* (Tephritidae – fruit flies) is a natural enemy and has been established in Guam.

PIER Risk Assessment: High Risk, score: 34

a) Pure stand of Chromolaena

b) Closer look at a pure stand of Chromolaena

c) Chromolaena flower arrangement showing developing seeds



d) Chromolaena in flower

e) Chromolaena seeds showing hairs

Photos a, b & c and header: Pacific Island Ecosystems at Risk (PIER): www.hear.org/Pier/index.html

Photos d & e: R.A. Howard. ©Smithsonian Institution. Courtesy of Smithsonian Institution, Richard A. Howard Photograph Collection.

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