

Invasive Species Fact Sheet

Pacific Islands Area



Joee (*Stachytarpheta cayennensis*)

- Scientific name & Code:** *Stachytarpheta cayennensis* (Rich.) Vahl, STCA8
Synonyms – *Stachytarpheta dichotoma* (Ruiz & Pav.) Vahl, *Valerianoides cayennensis* (Rich.) Kuntze
- Family:** Verbenaceae (verbena family)
- Common names:** English – Cayenne porterweed, dark blue snakeweed, joee, vervain; Chuukese – ouchung, sakura; Fijian – lavenia, se karakarawa, serakawa, tumbutumbu, turulakaka; Hawaiian – oi, Palauan – louch beluu; Samoa – mautofu, mautofu fualanumoana, mautofu tai, mautofu tala, mautofu vao; Tongan – hiku 'l kuma, 'iku 'l kuma, iku 'ikuma
- Origin:** Tropical America
- Description:** Coarse perennial herb or subshrub 8-20 dm tall, woody at base; stems weakly erect and intricately branched. Leaves opposite, elliptic to ovoid, 4-8 cm long, 2-4.5 cm wide, upper surface wrinkled or creased (rugose). Leaf margins sharply and coarsely toothed (serrate). Flowering spikes slender, 14-40 cm long, about 2.5 mm in diameter. Flowers trumpet-like with petals about 7 mm long, the tube also about 7 mm long, dark purplish-blue to lavender. The fruits are nutlets enclosed in a persistent calyx.
- Propagation:** Usually spread by animals or humans. Seeds are dispersed on vehicles and by run-off. Some evidence that it can reproduce by vegetative fragmentation.
- Distribution:** Pantropical. Identified in Hawaii, Rota, Saipan, Tinian, and Guam.
- Habitat / Ecology:** A common weed in pastures, plantations, roadsides, and waste areas. Grows best in deep, moist, fertile, disturbed soils. Can establish on infertile soils. Grows from sea level to over 2,000 m in elevation. Hybridizes naturally with *S. jamaicensis* (has darker color to flowers and leaves).
- Environmental impact:** Invades disturbed areas forming dense stands in high rainfall areas; persists at lower densities in dry areas. Somewhat shade tolerant. Out competes vegetation by smothering other plants. Unpalatable to livestock (and presumably wildlife).
- Management:** Physical – Controlled by chipping or cultivation; suppressed by slashing and competition from vigorous pasture species.
Chemical – Sensitive to translocated herbicides, including 2,4-D, MCPA, and Glyphosate (spray or wick application). Less effective control with Triclopyr.
Biological – No natural enemies identified.

PIER Risk Assessment: High Risk, score: 20

Joee - *Stachytarpheta cayennensis*



a) *Stachytarpheta* flower and spike



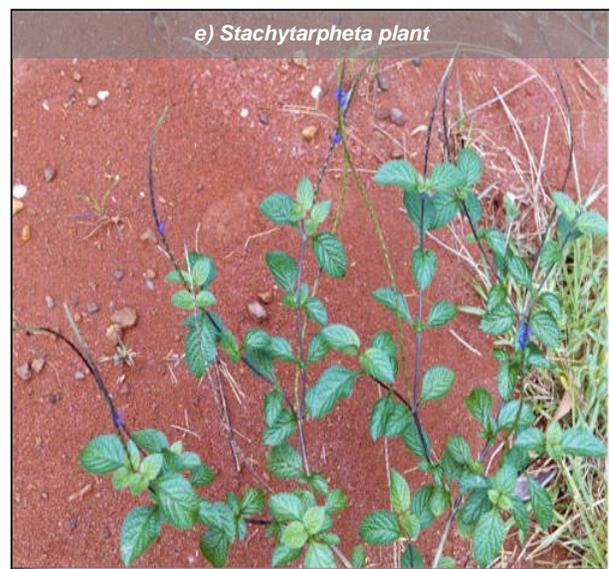
b) *Stachytarpheta* flower and spike



c) *Stachytarpheta* flower and leaves



d) *Stachytarpheta* infestation



e) *Stachytarpheta* plant

Photo a: ©G.A. Cooper. Courtesy of Smithsonian Institution, Department of Systematic Biology-Botany
Photo b: P. Acevedo, Plant Image Collection - Department of Botany, Smithsonian Institution
Photo c: ©Lidia Perez de Molas, Missouri Botanical Garden (w3Tropicos)
Photos d & e: Pacific Ecosystems at Risk (PIER): www.hear.org/Pier/index.html

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