

Artemisia annua L.

Standardized Common Name: Sweet Wormwood

Other Common Names: Annual Sagewort, Annual Wormwood, Sweet Annie

Family: Asteraceae (Compositae)

Parts in Commerce: Whole herb

Identification:

- Stems hairless, longitudinally striated, green or older parts sometimes reddish
- Leaves 3–10 cm long, (1–)3-pinnately divided or lobed, often resembling a fern's frond; the smallest divisions lanceolate, <1 mm broad, <1 cm long
- Leaves nearly hairless on both surfaces
- Inflorescence a loose leafy panicle; bracts resembling vegetative leaves, smaller and less divided
- Heads numerous, round, often drooping, to 2 mm high, 2–3 mm in diameter
- Involucre hemispheric, glossy; bracts ovate, at least the inner ones having a green midrib and dry margins
- Receptacle a minute, hairless conical knob
- Florets all greenish yellow; corollas ca. 1 mm long, more or less tubular and mostly 5-toothed, hairless except for small yellow glands
- Odor aromatic, sweet
- Taste aromatic, slightly bitter

Adulterants: Adulteration is not known to be a problem. Cultivated material is preferred as it is thought to be more potent than wild-collected material, especially outside Asia. However, wild material from North America is found in commerce. *Artemisia annua* closely resembles the North American *A. biennis* Willd. The latter has nearly sessile heads borne on crowded spikelike panicles; the leaves are mostly bipinnately lobed or divided; and it has little or no sweet odor.

Taxonomy: As noted under *Artemisia absinthium* L., *Artemisia* is a very diverse genus whose taxonomy is incompletely understood. *Artemisia annua* is one of perhaps 170 species native to China. It occurs widely in Eurasia and has been naturalized on other continents, especially North America. Chemical variation correlated with geographic origin has been reported.

Description: Annual or biennial herb. Stem erect or spreading, branching, 0.3–1.5(–3.0) m high, glabrous. Leaves alternate, basally crowded, petiolate, 1–3-pinnatifid or pinnatisect, 3–10 cm long; ultimate segments lanceolate, acute; both surfaces glabrous or nearly so. Inflorescence a panicle or raceme, to 50 cm long, branches spreading or recurved; bracts leafy; heads numerous, small, widely spaced, pedicellate, often drooping. Heads hemispherical, greenish-yellow, with all florets tubular but ray florets female only, disk florets hermaphroditic. Involucre hemispheric, 1–2 mm high, glossy, of 8–14 bracts (phyllaries), the outer narrow and green, the inner with green midrib and scarious margins. Receptacle hairless. Ray florets 5–12+; corolla oblique, <1 mm long, glandular. Disk florets 5–20; corolla 1 mm long, 5-toothed, glandular. Fruit an achene, 1 mm long, broadening at top, smooth, glabrous, without pappus.

References:

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Figure 10: a-c, *Artemisia annua* inflorescence and habit.