

**WRITTEN FINDINGS OF THE
WASHINGTON STATE NOXIOUS WEED CONTROL BOARD
NOVEMBER 1997**

Scientific Name: *Salvia sclarea* L.

Common Name: Clary sage

Family: Labiatae (Lamiaceae)

Legal Status: Class A

Description and Variation: Clary sage is a much-branched, erect, biennial or perennial herb with large, triangular to egg-shaped leaves with leaf stems. Flowers occur in pairs of axillary cymes that arise from opposite bracts to form a false whorl. The flowers are bilabiate; the upper corolla lip is purple, and the lower lip is whitish. The entire plant is hairy and has a strong odor due to an essential oil (Tutin et al. 1972; Bianchini and Corbetta 1975).

Economic Importance: *Detrimental:* Clary sage poses a threat to forage production and plant biodiversity by displacing less competitive, more desirable species. The species has demonstrated its invasive characteristics in Idaho, where it once covered more than 1000 acres (L. Wilson, pers. comm.). In addition, clary sage is a close relative of Mediterranean sage, a Class A noxious weed in Washington, which covers extensive areas of rangeland in Idaho, Oregon, and California.

Beneficial: The inflorescence of clary sage yields an essence, which is used in perfumery and distilling. The plant is also used in cooking, to flavor liqueurs and wines, and for medicinal purposes, since it has stomachic, anti-perspirant, and haemagogic properties (Bianchini and Corbetta 1975). The genus name is derived from Latin *salvere* - to be saved, referring to its medicinal properties. The species name clary, from the Latin *clarus*, refers to clear-eye; the mucilaginous seeds - when soaked in water, were used to clear grit from the eyes (Grieve 1995).

Habitat: Clary sage occurs on two confirmed sites in Stevens County, Washington. In one area, it occurs on a relatively steep slope with ponderosa pine; the site is relatively dry and well-drained. The species also occurs in less well-drained meadow sites (SCNWCB, pers. comm.).

Geographic Distribution: Clary sage is native to southern Europe, as well as the eastern European, Caucasus, and middle Asian regions of the former USSR (Czerepanov 1995, Tutin et al. 1972; Guinochet and de Vilmorin 1975). In the Pacific Northwest, the plant is known from numerous sites in Idaho, where it once covered 1000 acres or more (L. Wilson, pers. comm.). In Washington, clary sage has recently been reported from Stevens County in the Chewelah/Valley area. Samples were collected from Klickitat, County, WA., in 1907 and 1909. (The Washington State University Herbarium, 1997).

History: The exact history of clary sage in the Pacific Northwest is not known. It was one of the predominant weeds in the Salmon River area of Idaho in the 1920's and 1930's, but its populations

have declined in recent years (L. Wilson, pers. comm.). While the cause of the decline has not been studied, it may be attributable to the weevil, *Phrydiuchus tau*, which was introduced for Mediterranean sage control. Competition from other exotic species, such as yellow starthistle (*Centaurea solstitialis*) and medusahead (*Taeniatherum caput-medusae*) and control with herbicides have likely also contributed to its decline. (L. Wilson, pers. comm.)

The mode of introduction of this species into Washington is not known.

Reproduction: Clary sage is a biennial or perennial herb.

Response to Herbicide: Picloram, 2,4-D, and dicamba reportedly control this species. Due to the hairiness of the plant, a surfactant is necessary (L. Wilson, pers. comm.).

Response to Mechanical Methods: Hand-pulling should be effective.

Biocontrol Potentials: Although it was originally introduced to control Mediterranean sage (*S. aethiopsis*), the crown/root weevil, *Phrydiuchus tau*, does feed on clary sage. However, clary sage is not the preferred host (L. Wilson, pers. comm.).

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**References available from the Washington State Noxious Weed Control Board Office in Kent.*

Rationale for listing:

Clary sage poses a threat to forage production and plant biodiversity by displacing less competitive, more desirable species. The species has demonstrated its invasive characteristics in Idaho, where it once covered more than 1000 acres. In addition, clary sage is a close relative of Mediterranean sage, a Class A noxious weed in Washington, which covers extensive areas of rangeland in Idaho, Oregon, and California. Because of its demonstrated threats and potential to invade Washington, preventing the spread of this species is desirable. Clary sage is only known from one county in Washington; therefore, prompt action could eradicate it from the state.