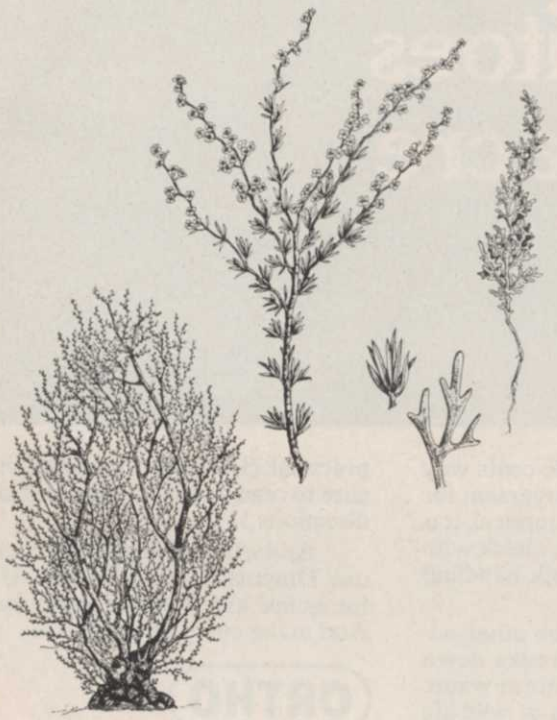
# CHAMISE

*(Adenostoma fasciculatum)*



Drawing from: California Range Brushlands and Browse Plants by Arthur W. Sampson and Beryl S. Jespersen. Calif. Agric. Expt. Sta. — Ext. Ser. Manual 33.

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The genus **Adenostoma** belongs to the Rose family and consists of two species — red shanks or ribbon bush (**A. sparsifolium**) and chamise (**A. fasciculatum**). Both are evergreen shrubs native to California.

Chamise is a diffusely branched shrub 2 to 12 feet tall. Its leaves are mainly fascicled, about ¼ inch long and sharp pointed. On seedlings and stump sprouts the leaves are larger and pinnately lobed. The small, white flowers occur in clusters 1½ to 4 inches long. The small seeds germinate profusely following a fire, with most seedlings not surviving the first year due to water stress; however, sufficient numbers survive to recover areas not already filled by sprouting species.

Commonly this shrub grows on shallow, rocky or poor soils, but is also present on some of the better sites. Because of its inflammable nature it is sometimes called greasewood. Chamise-covered areas are subject to periodic fires, and following such fires this plant develops numerous sprouts from its enlarged basal burl. These sprouts may be eaten to some extent by livestock or big game for 2 or 3 years following a fire; the brush then usually gains the upper hand, crowding out perennial grasses and reverting again to dense stands of brush. In general, associated with chamise are other species of sprouting and non-sprouting evergreen shrubs. These belong mainly to the **Quercus** (oak), **Ceanothus** (wild-lilac) and **Arctostaphylos** (manzanita) genera. When controlling chamise, one is confronted with controlling these other plants as well.

Chemical control of chamise should normally be initiated following a fire. Reasons for so doing include: 1) accessibility of the area is greatly increased; 2) fire hazard is greatly reduced over that existing in either living or chemically-killed unburned chamise; 3) grasses become established best following a fire, which helps to prevent the reestablishment of chamise from seedlings; and 4) chamise sprouts are far more easily killed by 2,4-D than are old unburned plants. It is important to plant grass because it competes successfully against chamise and other brush seedlings. Further, following chemical control of sprouts, grass maintains such areas as grasslands, since it tends to kill brush seedlings which germinate later by removing soil moisture.

Sprouting chamise can be controlled by broadcast applications of 2,4-D or brushkiller mixtures of 2,4-D and 2,4,5-T applied at yearly intervals. Two or more applications may be required to achieve complete control. Some of the woody species associated with chamise, such as scrub oak (**Quercus dumosa**), require repeated individual plant treatment to kill. It is usually desirable to start with spraying of chamise in the spring following a fire, especially when helicopters are used. Control is more difficult to obtain by aerial spraying than by ground spraying.

Sprouting chamise and especially old unburned plants are appreciably more sensitive to picloram than to 2,4-D. In fact, picloram makes it possible to kill old, mature chamise; the killed plants can then be burned to make the areas accessible, etc. However, cost and possible water contamination are considerations when it is used. A combination of picloram and 2,4-D is also effective against chamise, more so than 2,4-D used alone.

Reasons for controlling chamise include conversion of such areas into grazing land, development of fuel or fire breaks, reduction of fire hazard around homes, clearance for utility rights-of-way, and improvement of the natural landscape. Some shrubs should be left but these should not be too closely spaced in order to minimize competition for water between the shrubs. With prudence, beautiful shrub-covered areas can be developed.