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Biology and Management of Pampasgrass and Jubatagrass

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History and Identification

Jubatagrass (*Cortaderia jubata*) is a perennial grass native to northern Argentina and the Andes of Bolivia, Peru, and Ecuador (Connor and Edgar 1974). It forms a large vegetative plant body with leaf blades 2 – 3 cm wide, and up to 2 m long with sharp serrated edges. The vegetative portion is known as a tussock, from which the reproductive portion, several tall plumes (inflorescences), arise (flowering stalk 2 – 4 m tall and plume 30 – 90 cm long). Each inflorescence can produce thousands of wind dispersed seed through apomixis (asexual seed production).

Jubatagrass is thought to have been introduced into California by the horticultural industry, mistakenly imported as a variety of pampasgrass (*Cortaderia selloana*), a popular landscaping plant also native to South America (Costas Lippmann 1977). In addition to their ornamental value, *C. selloana* and *C. jubata* were introduced into the United States (California), South Africa, and New Zealand for their use as dry land forage, windbreaks, and soil stabilizers (Harradine 1991, Costas Lippmann 1977).

Jubatagrass is localized along the California coast in areas with a strong marine influence (cool, wet winters with little frost, and summer temperatures moderated by fog or wind). It is believed that the California ecotype is unable to tolerate inland environmental conditions. Within its range, it invades a variety of habitats (coastal strand, northern coastal scrub, coastal sage scrub, north coastal coniferous forest, closed cone pine forest, redwood forest and chaparral), and often becomes established at disturbed sites including slides, roadsides, graded areas, quarries, and previously logged conifer forests (Fritzke and Moore 1998, Harradine 1991).

Jubatagrass was originally reported as a weed in California in the 1960s in cutover redwood forests in Humboldt County (Fuller 1976). Its current California distribution ranges from San Diego to the Oregon boarder (DiTomaso et al. 1999). As a result, the California Exotic Pest Plant Council has recognized jubatagrass as one of the most widespread, invasive wildland pest plants in California (Randall et al. 1998). It establishes dense populations that have been shown to reduce conifer growth, interfere with conifer seedling recruitment, and occupy space otherwise inhabited by native plant species (Harradine 1991).

Jubatagrass (*C. jubata*) and pampasgrass (*C. selloana*) look very similar, resulting in a great deal of misidentification and a confusing history in California. Pampasgrass was the only species recognized in California in floras prior to the 1993 Jepson Manual. It was widely recognized in the literature that jubatagrass was an aggressive weed, while pampasgrass was regarded as an occasional garden escape (Costas Lippmann 1977). Persistent misidentification of the species and a geographical bias perpetuated this notion.

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