SOUR GRASS
IN HAWAII

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One of the most serious, unpalatable, pasture grass pests to find its way into Hawaii is the sour grass (*Trichachne insularis* (L.) Nees). It is tough and has a bitter, acrid taste. This grass is often called Puerto Rico grass because it is believed to have come to the islands from Puerto Rico, where the grass is commonly found and used by the natives for making hats. It was first collected in 1906 in Honolulu but was not noticed in the adjacent regions until about 1933, when suddenly it began to appear all over Oahu. In a few years it spread to all the major islands, and now it is a pest in pastures and cultivated fields. It has become especially abundant in the lower altitudes of Oahu in the relatively dry zones of 20 to 30 inches of rainfall. It is spreading gradually up the slopes into the more moist zones.

Eradication of sour grass requires unified action on the part of the entire community. Where only small patches occur, these should be dug up and destroyed. If the plants have flowering heads, these should be carefully removed and burned as they scatter very easily. The infested area should be visited periodically for at least a year to check on any new seedlings. Ranchers in particular should assist such a program of fighting the pest. Early eradication of a small patch of sour grass will save much work and expense later. Hungry animals seldom eat the grass except when other forage is not available. A partially dried plant is often eaten, but green plants are very rarely touched.

Once sour grass gains a foothold of any size, it is probably impossible to eradicate it. Guinea grass has been known to crowd out sour grass under natural conditions (without any disturbance from man or animal). Under grazing conditions the palatable guinea grass is well eaten and the unpalatable sour grass tends to take over. The carrying capacity of many hundreds of acres of good pasturelands have thus been reduced. Guinea grass can stand shade much better than sour grass. When these grasses are found growing side by side under kiawe and koa haole, the sour grass is crowded out in a much shorter period than when they are found growing in the open. However, small patches of sour grass in new areas should be destroyed.

The grass has a characteristic appearance and can be easily recognized. The accompanying diagram shows the characteristic appearance of a mature plant. Sour grass is an upright plant, 3 to 4 feet tall, with a bunch-growth habit. The flowering heads are silvery in appearance and drop to one side.

Ranchers, agriculturists, and students can easily become familiar with the appearance of the grass, but in case of doubt county agents may be consulted. By enlisting community support, any suspicious grass would be reported and steps taken immediately to check on the grass, thus eliminating any sporadic growth and encroachment over the entire island.