

TABLE 1.—SUMMARY OF ISLAND DISTRIBUTION OF 70 SPECIES FROM MAUI AND KAHOO LAWE—Continued

Species (common name)	Island distribution						
	Kauai	Oahu	Molokai	Lanai	Maui	Hawaii	NW Isles, Kahoolawe, Niihau
<i>Hesperomannia arbuscula</i> (NCN) .....	.....	C	.....	.....	C	.....	Ka (R)
<i>Hibiscus brackenridgei</i> (mao hau hele) .....	H	C	H	C	C	C	
<i>Ischaemum byrhone</i> (Hilo ischaemum) ...	C	H	C	.....	C	C	
<i>Isodendron pyriformis</i> (wahine noho kula) .....	.....	H	H	H	H	C	Ni (H)
<i>Kanaloa kahoolawensis</i> (kohe malama malama o kanaloa) .....	.....	.....	.....	.....	.....	.....	Ka (C)
<i>Lipochaeta kamolensis</i> (nehe) .....	.....	.....	.....	.....	C	.....	NW Isles (C)
<i>Lysimachia lydgatei</i> (NCN) .....	.....	H	.....	.....	C	.....	
<i>Mariscus pennatifolius</i> (NCN) .....	H	H	.....	.....	C	H	
<i>Melicope adscendens</i> (alani) .....	.....	.....	.....	.....	C	.....	
<i>Melicope balloui</i> (alani) .....	.....	.....	.....	.....	C	.....	
<i>Melicope knudsenii</i> (alani) .....	C	.....	.....	.....	C	.....	
<i>Melicope mucronulata</i> (alani) .....	.....	.....	C	.....	C	.....	Ka (H)
<i>Melicope ovalis</i> (alani) .....	.....	.....	.....	.....	C	.....	
<i>Neraudia sericea</i> (NCN) .....	.....	.....	C	H	C	.....	
<i>Nototrichum humile</i> (kului) .....	.....	C	.....	.....	H	.....	
<i>Peucedanum sandwicense</i> (makou) .....	C	C	C	.....	C	.....	
<i>Phlegmariurus mannii</i> (wawaeiole) .....	H	.....	.....	.....	C	C	
<i>Phyllostegia mannii</i> (NCN) .....	.....	.....	C	.....	H	.....	
<i>Phyllostegia mollis</i> (NCN) .....	.....	C	H	.....	C	.....	
<i>Phyllostegia parviflora</i> (NCN) .....	.....	C	.....	.....	H	H	
<i>Plantago princeps</i> (laukahi kuahiwi) .....	C	C	C	.....	C	H	
<i>Platanthera holochila</i> (NCN) .....	C	H	C	.....	C	.....	Ni (H), Ka (C), NW Isles (C)
<i>Pteris lidgatei</i> (NCN) .....	.....	C	H	.....	C	.....	
<i>Remya mauiensis</i> (NCN) .....	.....	.....	.....	.....	C	.....	
<i>Sanicula purpurea</i> (NCN) .....	.....	C	.....	.....	C	.....	
<i>Schiedea haleakalensis</i> (NCN) .....	.....	.....	.....	.....	C	.....	
<i>Schiedea hookeri</i> (NCN) .....	.....	C	.....	.....	H	.....	
<i>Schiedea nuttallii</i> (NCN) .....	C	C	C	.....	R	.....	
<i>Sesbania tomentosa</i> (ohai) .....	C	C	C	H	C	C	
<i>Solanum incompletum</i> (popolo ku mai) .....	H	.....	H	H	H	C	
<i>Spermolepis hawaiiensis</i> (NCN) .....	C	C	C	C	C	C	
<i>Tetramolopium arenarium</i> (NCN) .....	.....	.....	.....	.....	H	C	Ni (H), Ka (C)
<i>Tetramolopium capillare</i> (pamakani) .....	.....	.....	.....	.....	C	.....	
<i>Tetramolopium remyi</i> (NCN) .....	.....	.....	.....	C	H	.....	
<i>Vigna o-wahuensis</i> (NCN) .....	.....	H	C	C	C	C	
<i>Zanthoxylum hawaiiense</i> (ae) .....	C	.....	C	H	C	C	

**Key:**

C (Current)—population last observed within the past 30 years

H (Historical)—population not seen for more than 30 years

R (Reported)—reported from undocumented observations

NCN—no common name

Eighteen of these species are endemic to the islands of Maui and Kahoolawe, while 42 species are reported from one or more other islands, as well as Maui and/or Kahoolawe. Each of these species is described in more detail below in the section, "Discussion of Plant Taxa." Although we considered designating critical habitat on Maui and Kahoolawe for each of the 70 plant species, for the reasons described below, the final designation includes critical habitat for 60 of 70 plant species. Species that also occur on other islands may have critical habitat designated on other islands in previous or subsequent rulemakings.

**The Islands of Maui and Kahoolawe**

Maui, the second largest island in Hawaii at 1,888 square kilometers (sq km) (729 square miles (sq mi)) in area, was formed from the remnants of two large shield volcanoes, the older West Maui volcano (1.3 million years) on the west and the larger, but much younger, Haleakala volcano on the east. Stream erosion has cut deep valleys and ridges into the originally shield-shaped West Maui volcano. The highest point on West Maui is Puu Kukui at 1,764 meters (m) (5,787 feet (ft)) elevation, which has an average rainfall of 1,020 centimeters (cm) (400 inches (in)) per year, making it the second wettest spot in Hawaii (Department of Geography 1998).

Having erupted just 200 years ago, East Maui's Haleakala crater, reaching 3,055 m (10,023 ft) in elevation, has retained its classic shield shape and lacks the diverse vegetation typical of the older and more eroded West Maui mountain. Rainfall on the slopes of Haleakala is about 89 cm (35 in) per year, with its windward (northeastern) slope receiving the most precipitation. However, Haleakala's crater is a dry cinder desert because it is above the level at which precipitation develops and is sheltered from moisture-laden winds (Gagne and Cuddihy 1999).

The island of Kahoolawe measures about 17.7 km (11 mi) long by 11.3 km (7 mi) wide, comprising some 11,655 ha (28,800 ac). Located in the lee of