

total of five individuals are located at Makolelau and Puu Hoi Ridge on private lands (GDSI 2000, HINHP Database 2000).

On Molokai, *Zanthoxylum hawaiiense* is found on gulch slopes in mesic *Metrosideros polymorpha* or *Diospyros sandwicensis* forest between 754 and 1,084 m (2,473 and 3,555 ft) in elevation. Associated species include *Alyxia oliviformis*, *Dodonaea viscosa*,

Leptecophylla tameiameiae, *Myrsine lanaiensis*, *Nestegis sandwicensis*, *Osteomeles anthyllidifolia*, *Pleomele auwahiensis*, or *Psychotria* spp. (HINHP Database 2000; Stone *et al.* 1999; 59 FR 10305; J. Lau, *in litt.* 2001).

The threats to *Zanthoxylum hawaiiense* on Molokai include browsing, grazing, and trampling by feral goats; competition with non-native plant species; habitat degradation and

destruction by humans; and extinction from naturally occurring events (primarily fire) and/or from reduced reproductive vigor due to the small number of individuals and occurrences (Service 1996b, 59 FR 10305).

A summary of occurrences and landownership for the 51 plant species reported from the island of Molokai is given in Table 2.

TABLE 2.—SUMMARY OF EXISTING OCCURRENCES ON MOLOKAI AND OF LANDOWNERSHIP FOR 51 SPECIES REPORTED FROM MOLOKAI

Species	Number of current occurrences	Landownership		
		Federal	State	Private
<i>Adenophorus periens</i>	1	.....	.....	X
<i>Alectryon macrococcus</i>	6	.....	X	X
<i>Bidens wiebkei</i>	5	.....	.....	X
<i>Bonamia menzeisii</i>	0	.....	.....	.....
<i>Brighamia rockii</i>	5	.....	X	X
<i>Canavalia molokaiensis</i>	7	.....	X*	X
<i>Centaurium sebaeoides</i>	2	.....	X*	X
<i>Clermontia oblongifolia</i> ssp. <i>brevipes</i>	5	.....	.....	X
<i>Ctenitis squamigera</i>	1	.....	.....	X
<i>Cyanea dunbarii</i>	1	.....	X	.....
<i>Cyanea grimesiana</i> ssp. <i>grimesiana</i>	2	.....	X	.....
<i>Cyanea mannii</i>	8	.....	X	X
<i>Cyanea procera</i>	5	.....	X	X
<i>Cyperus trachysanthos</i>	0	.....	.....	.....
<i>Diellia erecta</i>	4	.....	.....	X
<i>Diplazium molokaiense</i>	0	.....	.....	.....
<i>Eugenia koolauensis</i>	0	.....	.....	.....
<i>Flueggea neowawraea</i>	0	.....	.....	.....
<i>Hedyotis mannii</i>	1	.....	.....	X
<i>Hesperomannia arborescens</i>	1	.....	.....	X
<i>Hibiscus arnottianus</i> ssp. <i>immaculatus</i>	3	.....	X	X
<i>Hibiscus brackenridgei</i>	0	.....	.....	.....
<i>Ischaemum byrone</i>	2	.....	.....	X
<i>Isodendron pyrifolium</i>	0	.....	.....	.....
<i>Labordia triflora</i>	1	.....	.....	X
<i>Lysimachia maxima</i>	1	.....	.....	X
<i>Mariscus fauriei</i>	1	.....	X	.....
<i>Marsilea villosa</i>	4	.....	X	X
<i>Melicope mucronulata</i>	2	.....	.....	X
<i>Melicope munroi</i>	0	.....	.....	.....
<i>Melicope reflexa</i>	3	.....	X	X
<i>Neraudia sericea</i>	1	.....	.....	X
<i>Peucedanum sandwicense</i>	5	.....	X*	X
<i>Phyllostegia mannii</i>	1	.....	.....	X
<i>Phyllostegia mollis</i>	0	.....	.....	.....
<i>Plantago princeps</i>	1	.....	.....	X
<i>Platanthera holochila</i>	1	.....	.....	X
<i>Pritchardia munroi</i>	1	.....	.....	X
<i>Pteris lidgatei</i>	0	.....	.....	.....
<i>Schiedea lydgatei</i>	4	.....	X	X
<i>Schiedea nuttallii</i>	1	.....	.....	X
<i>Schiedea sarmentosa</i>	5	.....	.....	X
<i>Sesbania tomentosa</i>	9	.....	X	X
<i>Silene alexandri</i>	0	.....	.....	.....
<i>Silene lanceolata</i>	1	.....	.....	X
<i>Solanum incompletum</i>	0	.....	.....	.....
<i>Spermolepis hawaiiensis</i>	1	.....	.....	X
<i>Stenogyne bifida</i>	5	.....	.....	X
<i>Tetramolopium rockii</i>	4	.....	X*	X
<i>Vigna o-wahuensis</i>	2	.....	.....	X
<i>Zanthoxylum hawaiiense</i>	2	.....	.....	X

*Some occurrences are on State land that is managed by the National Park Service at Kalaupapa National Historical Park and/or the U.S. Coast Guard Reservation at Kalaupapa.