

**U.S. FISH AND WILDLIFE SERVICE
SPECIES ASSESSMENT AND LISTING PRIORITY ASSIGNMENT FORM**

SCIENTIFIC NAME: *Platydesma remyi*

COMMON NAME: No common name

LEAD REGION: Region 1

INFORMATION CURRENT AS OF: April 2010

STATUS/ACTION

Species assessment - determined we do not have sufficient information on file to support a proposal to list the species and, therefore, it was not elevated to Candidate status

New candidate

Continuing candidate

Non-petitioned

Petitioned - Date petition received: May 11, 2004

90-day positive - FR date:

12-month warranted but precluded - FR date: May 11, 2005

Did the petition request a reclassification of a listed species?

FOR PETITIONED CANDIDATE SPECIES:

a. Is listing warranted (if yes, see summary of threats below)? Yes

b. To date, has publication of a proposal to list been precluded by other higher priority listing actions? Yes

c. If the answer to a. and b. is "yes", provide an explanation of why the action is precluded.

Higher priority listing actions, including court-approved settlements, court-ordered and statutory deadlines for petition findings and listing determinations, emergency listing determinations, and responses to litigation, continue to preclude the proposed and final listing rules for the species. We continue to monitor populations and will change its status or implement an emergency listing if necessary. The "Progress on Revising the Lists" section of the current CNOR (<http://endangered.fws.gov/>) provides information on listing actions taken during the last 12 months.

Listing priority change

Former LPN:

New LP:

Date when the species first became a Candidate (as currently defined):

September 19, 1997

Candidate removal: Former LP:

A – Taxon is more abundant or widespread than previously believed or not subject to the degree of threats sufficient to warrant issuance of a proposed listing or continuance of candidate status.

- ___ U – Taxon not subject to the degree of threats sufficient to warrant issuance of a proposed listing or continuance of candidate status due, in part or totally, to conservation efforts that remove or reduce the threats to the species.
- ___ F – Range is no longer a U.S. territory.
- ___ I – Insufficient information exists on biological vulnerability and threats to support listing.
- ___ M – Taxon mistakenly included in past notice of review.
- ___ N – Taxon does not meet the Act’s definition of “species.”
- ___ X – Taxon believed to be extinct.

ANIMAL/PLANT GROUP AND FAMILY: Flowering plants, Rutaceae (Rue family)

HISTORICAL STATES/TERRITORIES/COUNTRIES OF OCCURRENCE: Hawaii, island of Hawaii

CURRENT STATES/COUNTIES/TERRITORIES/COUNTRIES OF OCCURRENCE: Hawaii, island of Hawaii

LAND OWNERSHIP: *Platydesma remyi* occurs within the State’s Lauphahoe Natural Area Reserve and the Hilo Forest Reserve.

LEAD REGION CONTACT: Linda Belluomini, (503) 231- 6283, linda_belluomini @fws.gov

LEAD FIELD OFFICE CONTACT: Pacific Islands Fish and Wildlife Office, Christa Russell, 808-792-9400, christa_russell@fws.gov

BIOLOGICAL INFORMATION

Species Description

Platydesma remyi is a shrub or shrubby tree 3.3 to 9.8 feet (ft) (1 to 3 meters (m)) tall with spreading branches that are leafy towards the ends. Vegetation is densely glandular punctuate throughout, while new growth and inflorescences are glabrous or have yellowish brown pubescence. Leaves are obovate with entire margins. The upper leaf surface is glabrous while the lower surface is sparsely pubescent when young. Flowers occur in axillary cymes composed of one to three flowers per inflorescence. Fruit is subglobose, 0.08 to 0.12 inches (20 to 30 millimeters) in diameter with five to eight seeds per cell. *Platydesma remyi* differs from *P. spathulata* primarily in having sessile or subsessile leaves and puberulent leaves, calyx and fruit (Stone *et al.* 1999, p. 1,210).

Taxonomy

Platydesma remyi was first described by Sherff (1936) as a species of *Claoxylon* and was later placed in the genus *Platydesma* by Degener *et al.* (1960). This species is recognized as a distinct taxon in Stone *et al.* (1999) the most recently accepted Hawaiian plant taxonomy.

Habitat/Life History

There is limited information available on the habitat and life history of this species. *Platydesma*

remyi is known from wet forests on old volcanic slopes above 3,000 ft (914 m) elevation in the Kohala Mountains and between 2,000 and 3,000 ft (610 and 915 m) elevation on the eastern slope of Mauna Kea (Hawaii Heritage Program 1990; Perlman and Wood 1996; Hawaii Biodiversity and Mapping Program (HBMP) 2008).

Historical Range/Distribution

Historically, *Platydesma remyi* was known from Humuula within the Hilo FR, Kaawalii stream in Laupahoehoe NAR, and the Hamakua Ditch Trail in Kohala (last seen in 1979), on the island of Hawaii (HBMP 2008).

Current Range/Distribution

Currently, this species occurs in the Laupahoehoe NAR and the Hilo FR on the slopes of Mauna Kea on the island of Hawaii (L. Perry, pers. comm. 2007; HBMP 2008).

Population Estimates/Status

This species is known from only two populations totaling fewer than 50 plants. There may be 1 to 3 plants in one population in the Hilo FR and approximately 40 individuals in one widely scattered population within the State's Laupahoehoe NAR (L. Perry, DOFAW, pers. comm. 2007; S. Perlman, National Tropical Botanical Garden (NTBG), pers. comm. 2007; R. Warshauer, U.S. Geological Survey-Biological Resource Discipline, pers. comm. 2007).

THREATS

A. The present or threatened destruction, modification, or curtailment of its habitat or range.

Platydesma remyi is highly and imminently threatened by feral pigs (*Sus scrofa*) and cattle (*Bos taurus*) that degrade and destroy habitat (HBMP 2008). Evidence of the activities of feral pigs has been reported at both known locations while evidence of the activities of feral cattle has been reported in the area of the Hilo FR population (HBMP 2008; N. Agorastos, DOFAW, pers. comm. 2007; L. Perry, DOFAW, pers. comm. 2007; Plant Extinction Prevention Program (PEP) 2008, p. 107).

Pigs of Asian ancestry were introduced to Hawaii by the Polynesians, and the Eurasian type was introduced to Hawaii by Cook in 1778, with many other introductions thereafter (Tomich 1986). Some pigs raised as food escaped into the forests of Hawaii, Kauai, Oahu, Molokai, Maui, and Niihau, and are now managed as a game animal by the State to optimize hunting opportunities (Tomich 1986; State of Hawaii 2001). In a study conducted in the 1980s on feral pig populations in the Kipahulu Valley on Maui, the deleterious effects of feral pig rooting on native forest ecosystems was documented (Diong 1982). Kipahulu Valley consists of a diverse composition of native ecosystems, from near sea level to alpine, and forest types ranging from mesic to wet, *Acacia koa* (koa) and/or *Metrosideros polymorpha* (ohia), which is similar to the habitat of *Platydesma remyi*. Rooting by feral pigs was observed to be related to the search for earthworms, with rooting depths averaging 8 inches (20 centimeters), greatly disrupting the leaf litter and topsoil layers, and contributing to erosion and changes in ground topography. The feeding habits of pigs were observed to create seed beds, enabling the establishment and spread of weedy species such as *Psidium cattleianum* (strawberry guava). The study concluded that all aspects of the food habits of pigs are damaging to the structure and function of the Hawaiian

forest ecosystem (Diong 1982). The effects on mesic and wet forest habitat by foraging of feral pigs have also been reported in fencing studies. In a fencing study conducted in the montane bogs of Haleakala, it was found that when feral pigs were fenced out of an area the cover of native plant species increased from 6 percent to 95 percent within six years of protection (Loope *et al.* 1991).

Cattle, the wild progenitors of which were native to Europe, northern Africa, and southwestern Asia, were introduced to the Hawaiian Islands in 1793. Large feral herds developed as a result of restrictions on killing cattle decreed by King Kamehameha I. While small cattle ranches were developed on Kauai, Oahu, and west Maui, very large ranches of tens of thousands of acres were created on east Maui and Hawaii. Feral cattle can presently be found on the islands of Hawaii and Maui, and ranching is still a major commercial activity. Cattle eat native vegetation, trample roots and seedlings, cause erosion, create disturbed areas into which alien plants invade, and spread seeds of alien plants in their feces and on their bodies. The forest in areas grazed by cattle becomes degraded to grassland pasture, and plant cover is reduced for many years following removal of cattle from an area. Several alien grasses and legumes purposely introduced for cattle forage have become noxious weeds (Tomich 1986; Cuddihy and Stone 1990).

Hawaiian ecosystems, having evolved without hoofed mammals, are susceptible to large-scale disturbance by pigs, cattle, and other introduced ungulates (Loope *et al.* 1991). Because of demonstrated habitat modifications by feral pigs and cattle, such as destruction of native plants, disruption of topsoil leading to erosion, and establishment and spread of nonnative plants, the Service believes feral pigs and cattle are threats to *Platydesma remyi*.

B. Overutilization for commercial, recreational, scientific, or educational purposes.

None known.

C. Disease or predation.

Predation by feral pigs is a potential threat to *Platydesma remyi* because evidence of pig activities in the two known locations (Laupahoehoe NAR and Hilo FR) of this species has been reported (HBMP 2008; N. Agorastos, pers. comm. 2007; L. Perry, pers. comm. 2007; PEP Program 2008, p. 107). Predation by feral cattle is a potential threat to individuals of *P. remyi* in the Hilo FR (HBMP 2008; L. Perry, pers. comm. 2007). Browsing by ungulates has been observed on many native plant species, including common and rare or endangered species (Cuddihy and Stone 1990; Loope *et al.* 1991). Because Hawaii's native plants evolved without any browsing or grazing mammals present, many lost natural defenses to such impacts (Carlquist 1980). Pigs are omnivorous in their diet. In the study described above on feral pig populations in the Kipahulu Valley, pigs were observed browsing on young shoots, leaves and fronds of a wide variety plants, of which over 85 percent were endemic species (Diong 1982). A stomach content analysis showed that the pigs' food sources consisted of native plants, 60 percent of which were tree ferns (*Cibotium* spp.), alternating with strawberry guava (*Psidium cattleianum*) when it was available. Pigs were observed to fell plants and remove the bark of *Clermontia*, *Cibotium*, *Coprosma*, *Psychotria*, and *Hedyotis* species (herbaceous and woody plants), with larger trees killed over a few months of repeated feeding. The ability of cattle to degrade native vegetation by grazing and trampling was recognized very soon after large-scale ranching began

in Hawaii (Cuddihy and Stone 1990). Therefore, even though we have no evidence of direct browsing for *P. remyi*, predation by feral pigs and cattle is a potential threat to this species.

D. The inadequacy of existing regulatory mechanisms.

Platydesma remyi currently receives no protection under Hawaii's endangered species law (HRS, Sect. 195-D) or the Federal Endangered Species Act (16 U.S.C. §1531-1544).

Pigs are managed in Hawaii as game animals, but many populate inaccessible areas where hunting is difficult, if not impossible, and therefore has little effect on their numbers (Hawaii Heritage Program 1990). Pig hunting is allowed year-round, or during certain months, depending on the area (Hawaii Department of Land and Natural Resources 1999, 2003); however, public hunting is not adequate to eliminate this threat to *Platydesma remyi*. Hunting of feral cattle is no longer allowed in Hawaii (Hawaii Department of Land and Natural Resources 1985) except under permitted conditions.

E. Other natural or manmade factors affecting its continued existence.

Platydesma remyi is threatened by alien plant species that degrade and destroy habitat and outcompete native plants (HBMP 2008). The nonnative plants that are reported to be the greatest threats to *P. remyi* in the Laupahoehoe NAR and Hilo FR are *Psidium cattleianum* (strawberry guava), *Passiflora molissima* (banana poka), *Sphaeropteris cooperi* (Australian tree fern), *Angiopteris evecta* (mule's-foot fern), and *Clidemia hirta* (Koster's curse) (N. Agarostos, pers. comm. 2007; L. Perry, pers. comm. 2007; PEP Program 2008, p. 107).

Angiopteris evecta is a tree fern with large, spreading fronds (23 by 10 ft (7 by 3 m)) that is quickly expanding its range in moist forest valleys and ridges on the main Hawaiian islands since its introduction in 1927 (Palmer 2003, pp. 48-49). It spreads by wind-borne spores and overtops and crowds out other vegetation (PIER 2009).

Clidemia hirta is a noxious shrub first cultivated in Wahiawa on Oahu before 1941. This pest plant forms a dense understory, shading out native plants and hindering their regeneration, and is considered a serious plant threat (Wagner *et al.* 1985; Smith 1989). The most promising biological control to date for Koster's curse is the *Colleotrichum* fungus, *Gloesporioides* f. sp. *clidemiae*, released in 1986. Although there is no quantitative data available, it has an observable negative impact. Other agents tested were a moth (*Antiblemma acclinalis*), a leaf-feeding beetle (*Lius poseidon*), a fruit and flower-feeding insect (*Mompha trithalama*), and a terminal growth-feeding insect (*Liothrips urichi*), all with lesser control success than the fungus (Smith 1989).

Passiflora mollissima, a vine native to South America, is widely cultivated for its fruit (Escobar 1999). First introduced to Hawaii in the 1920s, it is now a serious pest in mesic forest, where it overgrows and smothers the forest canopy. Seeds are readily dispersed by humans, birds, and feral pigs (La Rosa 1992). Fallen fruit encourage rooting and trampling by pigs (Diong 1982). Field releases of biocontrol insects have not been successful, but testing of fungi as biocontrol of this vine is ongoing (Gardner 2005).

Psidium cattleianum, a tree native to tropical America, has become widely naturalized on all the main islands of Hawaii. Found in mesic to wet forests, strawberry guava develops into dense stands in which few other plants can grow, displacing native vegetation. The fruit is eaten by pigs and birds, which then disperse the seeds throughout the forest (Smith 1985; Wagner *et al.* 1985). To date, no biological control agents have been released against strawberry guava in Hawaii, though insects for biocontrol are undergoing host-screening (Institute of Pacific Islands Forestry 2005).

Sphaeropteris cooperi, a tree fern native to Australia, was introduced to Hawaii for use in landscaping because it is faster growing than the native Hawaiian tree ferns (Medeiros *et al.* 1992, pp. 30-31). It achieves high densities in native Hawaiian forest, growing up to one ft (0.3 m) in height per year, with maximum known heights of 39 ft (12 m) (Jones and Clemesha 1981), and displaces native species. Understory disturbance by pigs facilitates the establishment of *S. cooperi* (Medeiros *et al.* 1992). This species has been known to spread over seven miles (12 kilometers) by windblown dispersal of spores from plant nurseries and is considered to be a serious threat to Hawaiian ecosystems (Medeiros *et al.* 1992, pp. 28-31; Palmer 2003, p. 245).

The original native flora of Hawaii consists of about 1,400 species, nearly 90 percent of which are endemic. Of the total native and naturalized Hawaiian flora of 1,817 taxa, 47 percent were introduced from other parts of the world, and nearly 100 species have become pests (Smith 1985; Wagner *et al.* 1999). Confirmed personal observations (HBMP 2008) and several studies (Cuddihy and Stone 1990; Wood and Perlman 1997; Robichaux *et al.* 1998, p. 4) indicate nonnative plant species may outcompete native plants similar to *Platydesma remyi*. Competition may be for space, light, water, or nutrients, or there may be a chemical produced that inhibits growth of other plants (Smith 1985; Cuddihy and Stone 1990). In addition, nonnative pest plants found in habitat similar to that of this species have been shown to make the habitat less suitable for native species (Smathers and Gardner 1978; Smith 1985; Loope and Medeiros 1992; Medeiros *et al.* 1992; Ellshoff *et al.* 1995; Meyer and Florence 1996; Medeiros *et al.* 1997; Loope *et al.* 2004). In particular, alien pest plant species degrade habitat by modifying availability of light, altering soil-water regimes, modifying nutrient cycling, or altering fire characteristics of native plant communities (Smith 1985; Cuddihy and Stone 1990; Vitousek *et al.* 1997). Because of demonstrated habitat modification and resource competition by nonnative plant species in habitat similar to the wet forest habitat of *Platydesma remyi* the Service believes nonnative plant species are a threat to this species.

With only two known populations, restricted to a very small area, extinction from randomly occurring natural events is also a major threat. Species like *Platydesma remyi* that are endemic to single islands are inherently more vulnerable to extinction than widespread species because of the higher risks posed to a single population by genetic bottlenecks, random demographic fluctuations, and localized catastrophes such as hurricanes (Mangel and Tier 1994; Pimm *et al.* 1988).

CONSERVATION MEASURES PLANNED OR IMPLEMENTED

To date, only a single wild individual has been protected in a small rare plant enclosure in the Laupahoehoe NAR (L. Perry, pers. comm. 2007). The Hawaii Division of Forestry and Wildlife received funding from the Service in 2005 to eradicate feral cattle from the Hilo FR, but this

project has not yet been implemented (J. Higashino, DOFAW, pers. comm. 2007). This species is currently represented in an ex situ collection at the Volcano Rare Plant Facility (Service 2005; P. Moriyasu, Volcano Rare Plant Facility, pers. comm. 2009).

SUMMARY OF THREATS

Based on our evaluation of habitat degradation and loss by feral pigs, cattle, and nonnative plants, we conclude there is sufficient information to develop a proposed rule for this species due to the present and threatened destruction, alteration, or curtailment of its habitat and range, and the displacement of individuals of *Platydesma remyi* due to competition with nonnative plants for space, nutrients, water, air, and light. Predation by feral pigs and cattle are potential threats to *P. remyi*. The small number of remaining individuals and limited range make this species susceptible to randomly occurring natural events such as hurricanes. We find that this species is warranted for listing throughout all its range, and, therefore, find that it is unnecessary to analyze whether it is threatened or endangered in a significant portion of its range.

RECOMMENDED CONSERVATION MEASURES

- Protect all individuals from feral pigs and cattle
- Control alien plants
- Conduct/update field surveys at known locations and in suitable habitat
- Propagate and maintain genetic stock

LISTING PRIORITY

THREAT			
Magnitude	Immediacy	Taxonomy	Priority
High	Imminent	Monotypic genus	1
		Species	2*
		Subspecies/population	3
	Non-imminent	Monotypic genus	4
		Species	5
		Subspecies/population	6
Moderate to Low	Imminent	Monotypic genus	7
		Species	8
		Subspecies/population	9
	Non-imminent	Monotypic genus	10
		Species	11
		Subspecies/population	12

Rationale for listing priority number:

Magnitude:

This species is highly threatened by feral pigs and cattle that degrade and destroy habitat, and by nonnative plants that compete for light, space, and nutrients, and reduced reproductive vigor and

extinction due to randomly occurring natural events. Threats to the wet, low-stature forest habitat of *Platydesma remyi*, and to individuals of this species, occur throughout its range and are expected to continue or increase without control or eradication. Ongoing conservation efforts for this species only benefit a single wild plant protected inside a small fenced enclosure within the Laupahoehoe NAR. The unmanaged populations in the Laupahoehoe NAR and Hilo FR are still impacted by these threats.

Immediacy of Threats:

Threats to *Platydesma remyi* include habitat degradation by feral pigs and cattle, and competition with nonnative plants, and are considered imminent because they are ongoing. Predation by feral ungulates is a potential threat to unmanaged populations.

Yes Have you promptly reviewed all of the information received regarding the species for the purpose of determining whether emergency listing is needed?

Is Emergency Listing Warranted? No. The species does not appear to be appropriate for emergency listing at this time because the immediacy of the threats is not so great as to imperil a significant proportion of the taxon within the time frame of the routine listing process. If it becomes apparent that the routine listing process is not sufficient to prevent large losses that may result in this species' extinction, then the emergency rule process for this species will be initiated. We will continue to monitor the status of *Platydesma remyi* as new information becomes available. This review will determine if a change in status is warranted, including the need to make prompt use of emergency listing procedures.

DESCRIPTION OF MONITORING

Much of the information on this form is based on the results of a meeting of 20 botanical experts held by the Center for Plant Conservation in December of 1995, and was updated by personal communication with Ken Wood of the National Tropical Botanical Garden, Fredrick Warshauer of the U.S.G.S Biological Resource Discipline, and Byron Stephens of the Hawaii Division of Forestry and Wildlife. We have incorporated additional information on this species from our files. In 2006, we received no new information on this taxon. New status information was provided in 2007 by Lyman Perry, Nick Agorastos and Jennifer Higashino, (Hawaii Division of Forestry and Wildlife), Patty Moriyasu, (Volcano Rare Plant Facility), Linda Pratt and Rick Warshauer, (U.S.G.S. Biological Resources Discipline), and Steve Perlman, (National Tropical Botanical Garden). In 2008, information on the status of this species was provided by Kealii Bio, Plant Extinction Prevention Program, and by Steve Perlman. In 2009 we received new information from Patrice Moriyasu, Volcano Rare Plant Facility. In 2010, we contacted the species experts listed below, but received no new information.

List all experts contacted:

Name	Date	Affiliation
Agorastos, Nick	02/09/10	Division of Forestry and Wildlife
Anderson, Stephen	02/09/10	National Park Service, Haleakala NP, Maui
Aruch, Sam	02/09/10	private contractor
Bakutis, Ane	02/09/10	Plant Extinction Prevention Program, Molokai

Ball, Donna	02/09/10	U.S. FWS, Partners Program, Hawaii Island
Beavers, Sally	02/09/10	National Park Service, Hawaii Island
Bily, Pat	02/09/10	The Nature Conservancy, Maui
Bio, Kealii	02/09/10	Plant Extinction Prevention Program, Hawaii Island
Brosius, Chris	02/09/10	West Maui Mountains Watershed Partnership
Caraway, Vickie	02/09/10	Hawaii Division of Forestry and Wildlife, Oahu
Ching, Susan	02/09/10	Plant Extinction Prevention Program, Oahu
Cole, Colleen	02/09/10	Three Mountain Alliance
Conry, Paul	02/09/10	Hawaii Department of Land and Natural Resources
Coordinator	02/09/10	East Maui Watershed Partnership
Duvall, Fern	02/09/10	Hawaii Division of Forestry and Wildlife, Maui
Fay, Kerri	02/09/10	The Nature Conservancy, Maui
Garnett, Bill	02/09/10	National Park Service, Kalaupapa, Molokai
Giffin, Jon	02/09/10	The Nature Conservancy, Hawaii Island
Haus, Bill	02/09/10	National Park Service, Haleakala NP, Maui
Higashino, Jennifer	02/09/10	U.S. FWS, Maui
Imada, Clyde	02/09/10	Bishop Museum
Jacobi, Jim	02/09/10	U.S.G.S., Biological Resources Division
Kawakami, Galen	02/09/10	Division of Forestry and Wildlife, Kauai
Kawelo, Kapua	02/09/10	U.S. Army, Environmental Division
Kier, Matt	02/09/10	U.S. Army, Environmental Division
Kiyabu, Brian	02/09/10	Amy Greenwell Botanical Garden
Kraus, Jim	02/09/10	U.S. FWS, Hakalau NWR
Medeiros, Arthur	02/09/10	U.S. Geological Survey
Misaki, Ed	02/09/10	The Nature Conservancy, Molokai
Moriyasu, Patty	02/09/10	Volcano Rare Plant Facility, Hawaii Island
Moses, Wailana	02/09/10	The Nature Conservancy, Molokai
Nakai, Glynnis	02/09/10	U.S. FWS, Refuges, Maui
Oppenheimer, Hank	02/09/10	Plant Extinction Prevention Program, Maui Nui
Palomino, Anna	02/09/10	Olinda Rare Plant Nursery, Maui
Palumbo, David	02/09/10	National Park Service, Haleakala NP, Maui
Pepi, Vanessa	02/09/10	U.S. Navy, Environmental Contractor
Perlman, Steve	02/09/10	National Tropical Botanical Garden
Perry, Lyman	02/09/10	Division of Forestry and Wildlife, Hawaii Island
Plunkett, Bryan	02/09/10	Lanai Forest and Watershed Partnership
Pratt, Linda	02/09/10	U.S.G.S., Biological Resources Division
Purell, Melora	02/09/10	Kohala Watershed Partnership
Seidman, Stephanie	02/09/10	Maui Nui Botanical Garden
Shishido, Glenn	02/09/10	Division of Forestry and Wildlife, Maui
Silbernagle, Mike	02/09/10	U.S. FWS, Refuges, Oahu
Smith, Miranda	02/09/10	Koolau Mountains Watershed Partnership
Starr, Forest	02/09/10	U.S. Geological Survey
Tanaka, Daniel	02/09/10	Puu Kukui Watershed Preserve
Ward, Joe	02/09/10	Puu Kukui Watershed Preserve
Welton, Patti	02/09/10	National Park Service, Haleakala NP, Maui
Wood, Ken	02/09/10	National Tropical Botanical Garden

The Hawaii Biodiversity and Mapping Program identified this species as critically imperiled (HBMP 2006). Based on the International Union for Conservation of Nature and Natural Resources Red List of Threatened Species, this species is recognized as Endangered (facing a very high risk of extinction in the wild) (Bruegmann and Caraway 2003). *Platydesma remyi* is included in the list of species in Hawaii's 2005 Comprehensive Wildlife Conservation Strategy (Mitchell *et al.* 2005).

COORDINATION WITH STATES

On February 11, 2010, we provided the Hawaii Division of Forestry and Wildlife with copies of our most recent candidate assessments for their review and comment. No additional information or comments were received.

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APPROVAL/CONCURRENCE: Lead Regions must obtain written concurrence from all other Regions within the range of the species before recommending changes, including elevations or removals from candidate status and listing priority changes; the Regional Director must approve all such recommendations. The Director must concur on all resubmitted 12-month petition findings, additions or removal of species from candidate status, and listing priority changes.

Approve:

Acting Carolyn D. Bohan 5/18/10
Regional Director, Region 1, Fish and Wildlife Service Date

Rowan W. Gould
ACTING :
Director, Fish and Wildlife Service October 22, 2010

Concur:

Do not concur: _____ Date: _____
Director, Fish and Wildlife Service

Director's Remarks:

Date of annual review: _____ Date: April 21, 2010
Conducted by: Cheryl Phillipson, Pacific Islands FWO
Biologist, Prelisting and Listing Program

Comments:

PIFWO Review

Reviewed by: Christa Russell Date: April 26, 2010
Prelisting and Listing Program Coordinator

Marilet Zablan Date: April 26, 2010
Assistant Field Supervisor, Endangered Species Division

Gina Shultz Date: April 30, 2010
Acting Field Supervisor