leaves are 10 to 18 cm (4 to 7 in) long and 1 to 1.8 cm (0.4 to 0.7 in) wide. The unbranched, erect flowering stalk is 20 to 42 cm (8 to 16.5 in) long. The violet petals are about 5 cm (0.2 in) long and collectively form a three-lobed tube. The largest lobe is curved downward and the other two are bent backward, giving the appearance of two lips. The capsules are almost round and contain numerous small, wind-dispersed seeds. This species differs from others of this endemic Hawaiian genus by the unbranched, erect flowering stalk (Lammers 1990).

Trematolobelia singularis has been reported only from the southern Koolau Mountains (HHP 1994cc1 to 1994cc4). Approximately 165 plants are known from three populations-Moanalua-Tripler Ridge summit to Puu Keahiakahoe, Konahuanui, and Puu Lanipo. These populations are found on private, City and County of Honolulu, State, and Federal land (Omega Coast Guard Station) (HHP 1994cc1 to 1994cc4, Lammers 1990). This species usually grows on steep, windswept cliff faces or slopes in 'ohi'a-uluhe lowland wet shrubland from 700 to 960 m (2,300 to 3,150 ft) elevation. Associated plant taxa include 'akia, hapu'u, kanawao, and na'ena'e pua melemele (HHP 1994cc1 to 1994cc3, Lammers 1990, Obata 1988, St. John 1982).

Habitat degradation by feral pigs, potential predation by rats, competition with the aggressive alien plant Koster's curse, and a risk of extinction from naturally occurring events and/or reduced reproductive vigor due to the small number of extant populations are serious threats to *Trematolobelia singularis* (HHP 1994cc1, 1994cc2, 1994cc4; J. Lau, C. Russell, and J. Yoshioka, pers. comms. 1994).

Forbes described *Viola oahuensis* in 1909, based on a specimen he collected with Rock in the Koolau Mountains. This species has been maintained in the most recent treatment of Hawaiian members of this genus (Wagner *et al.* 1990).

Viola oahuensis, a member of the violet family (Violaceae), is usually an erect, unbranched subshrub 6 to 40 cm (2.4 to 16 in) tall. The papery-textured leaves are usually 3 to 12 cm (1.2 to 4.7 in) long, 2.5 to 5.8 cm (1 to 2.3 in) wide, and elliptic-egg-shaped to elliptic. The leaf stalks are typically 0.5 to 1 cm (0.2 to 0.4 in) long. The narrowly triangular stipules are usually 10 to 15 mm (0.4 to 0.6 in) long, 3.5 to 6 mm (0.1 to 0.2 in) wide, and have fringed edges. One to two flowers are borne on stalks typically 25 to 60 mm (1 to 2.4 in) long. The petals are pale yellow, the upper ones 8 to 13 mm (0.3 to 0.5 in) long, the

lateral ones 10 to 13.5 mm (0.4 to 0.5 in) long, and the lower one 12 to 16 mm (0.5 to 0.6 in) long. The capsules are 9 to 16 mm (0.4 to 0.6 in) long. This species is distinguished from other Hawaiian members of the genus by the stipule characters, the length of the leaf stalks, and the length and papery texture of the leaves (Wagner et al. 1990).

Historically Viola oahuensis was known from 17 populations in the Koolau Mountains of Oahu scattered over about a 37 km (23 mi) distance from Puu Kainapuaa to Palolo (HHP 1994dd1 to 1994dd16; L. Mehrhoff, pers. comm. 1994). The 8 extant populations, which total fewer than 180 individuals, are now found from the Kawainui-Koloa summit divide to the Waimalu-Koolaupoko divide over a 20 km (12 mi) distance. These populations are found on Federal land; State land, including land leased by DOD for Kawailoa Training Area; City and County of Honolulu land; and private land, including land leased by DOD for Kawailoa Training Area (HHP 1994dd5, 1994dd9 to 1994dd13, 1994dd15, 1994dd16). Further to the south, at the summit of Moanalua, a single plant last seen alive in 1991 has since died (L. Mehrhoff, pers. comm. 1994). Viola oahuensis is generally found on exposed, windswept ridges of moderate to steep slope in wet 'ohi'a-uluhe shrublands from 700 to 850 m (2,300 to 2,800 ft) elevation. This species typically grows among wind-stunted na'ena'e pua melemele, 'uki, Sadleria sp. ('ama'u), 'ohi'a ha, and Vaccinium sp. ('ohelo) (HHP 1994dd5, 1994dd9 to 1994dd16).

The primary threats to *Viola* oahuensis are habitat degradation and/ or destruction by feral pigs; potential impacts from military activities; competition with Koster's curse, strawberry guava, *Paspalum conjugatum* (Hilo grass), and *Sacciolepis indica* (Glenwood grass); and a risk of extinction from naturally occurring events and/or reduced reproductive vigor due to the small number of populations (HHP 1994dd5, 1994dd9, 1994dd12, 1994dd13).

Previous Federal Action

Federal action on these plants began as a result of section 12 of the Endangered Species Act (16 U.S.C. 1533), which directed the Secretary of the Smithsonian Institution to prepare a report on plants considered to be endangered or threatened in the United States. This report, designated as House Document No. 94–51, was presented to Congress on January 9, 1975. Twelve of the 25 proposed taxa were considered to be endangered in that document-Cyanea humboldtiana (as Rollandia humboldtiana), Cyanea longiflora (as Rollandia sessilifolia), Cyanea st.-johnii (as Rollandia st.-johnii), Cyrtandra dentata (also as C. frederickii), Cyrtandra subumbellata (as C. subumbellata var. intonsa), Delissea subcordata (as D. subcordata var. subcordata and var. obtusifolia), Eragrostis fosbergii, Lobelia gaudichaudii ssp. koolauensis (as L. gaudichaudii var. koolauensis), Melicope saint-johnii (as Pelea saintjohnii var. elongata), Pritchardia kaalae (as P. kaalae var. kaalae and var. minima), Schiedea kealiae, and Viola oahuensis. Two of the 25 taxa were considered to be threatened-Lobelia monostachya (as L. hillebrandii var. monostachya) and Phyllostegia hirsuta (as P. hirsuta var. hirsuta and var. laxior). On July 1, 1975, the Service published a notice in the Federal Register (40 FR 27823) of its acceptance of the Smithsonian report as a petition within the context of section 4(c)(2)(now section 4(b)(3)) of the Act, and giving notice of its intent to review the status of the plant taxa named therein. As a result of that review, on June 16, 1976, the Service published a proposed rule in the Federal Register (41 FR 24523) to determine endangered status pursuant to section 4 of the Act for approximately 1,700 vascular plant species. The list of 1,700 plant taxa was assembled on the basis of comments and data received by the Smithsonian Institution and the Service in response to House Document No. 94-51 and the July 1, 1975, Federal Register publication.

General comments received in response to the 1976 proposal are summarized in an April 26, 1978, Federal Register publication (43 FR 17909). In 1978, amendments to the Act required that all proposals over two years old be withdrawn. A one-year grace period was given to proposals already over two years old. On December 10, 1979, the Service published a notice in the Federal Register (44 FR 70796) withdrawing the portion of the June 16, 1976, proposal that had not been made final, along with four other proposals that had expired. The Service published an updated notice of review for plants on December 15, 1980 (45 FR 82479), September 27, 1985 (50 FR 39525), February 21, 1990 (55 FR 6183), and September 30, 1993 (58 FR 51144). Sixteen of the taxa in this proposal (including synonymous taxa) have at one time or another been considered Category 1 or Category 2 candidates for Federal listing. Category