

479381-continued

September 15, 1982. Hokkaido Univ., Uryu Forest, Moshiri, Horokanai-cho, Uryu-gun, Hokkaido. Snow cover 1.5-2.5m per annum. Minimum temperature -35C. Shrub deciduous, 1.2-1.5m, much branched, multistemmed from base. Leaves bright green. In mixed woodland with *Kalopanax*, *Quercus*, & *Sasa* by field marker 320. Seed from several plants. Wild. Seed.

479382 TO 479383. *Euonymus fortunei* var. *radicans* (Sieb. ex Miq.) Rehd. (Celastraceae).

From Japan. Collected by Kawase, M.; Nielsen, D.; Meyer, F.; March, S.; Ohio Agricultural Research & Development Center; US National Arboretum; Wooster, Ohio; Washington, D.C.

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479382. JH-232-82. Japan. US National Arboretum. 51250. Collected October 01, 1982. Hokkaido Univ. Tomakomai Exp. Forest, Tomakomai-shi, Hokkaido. Lat. 42 deg. 38' N, Long. 141 deg. 39' E. Snow cover 40cm, ground freeze to 70cm. Minimum temperature -30C. Creeper evergreen, climbing on dead tree trunk, 4.5-6m tall, with holdfast roots on juvenile stems, mature branches 60-90cm long. Growing in woodland. Wild. Cuttings.

479383. JH-333-82. Japan. US National Arboretum. 51353. Collected October 09, 1982. Yunotai, Towada-shi, Aomori-ken, Honshu. Lat. 40 deg. 37' N, Long. 140 deg. 58' E. Minimum temperature -20C. Growing in open field. Cuttings taken from one plant. Wild. Cuttings.

479384 TO 479388. *Euonymus macroptera* Rupr. (Celastraceae).

From Japan. Collected by Kawase, M.; Nielsen, D.; Meyer, F.; March, S.; Ohio Agricultural Research & Development Center; US National Arboretum; Wooster, Ohio; Washington, D.C.

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479384. JH-22-82. Japan. US National Arboretum. 51041. Collected September 14, 1982. Dune Forest, Wakaisakanai, Toyotomimachi, Teshio-gun, Hokkaido. Lat. 45 deg. 05' N, Long. 141 deg. 43' E. Shrub deciduous, to 2m tall. Leaves light green above, rugose beneath, buds bright green. Fruit on pendulous peduncles, wings crimson. Mixed woodland growing with JH-20-82. Seed from several plants. Wild. Seed.

479385. JH-58-82. Japan. US National Arboretum. 51076. Collected September 17, 1982. Abashiri National Forest, Urbar,