

479334 TO 479340-continued

Minimum temperature -30C. Tree deciduous, small, with ascending branches, 7.6m tall, broad headed crown. Bark tight, light gray. Twigs brown, lustrous. Leaves dull dark green above with impressed veins, veins prominent beneath. Fruiting aments pendulous, yellowish green. Growing in woodland. Wild. Seed.

479338. JH-275-82. Japan. US National Arboretum. 51297. Collected October 05, 1982. Onuma, Nanae-machi, Kameda-gun, Hokkaido. Lat. 41 deg. 57' N, Long. 140 deg. 42' E. Snow cover for 2 days by 50cm or deeper. Minimum temperature -18C. Tree deciduous, 7.6m tall, spreading crown, dark brown shiny branches. Bark tight, smooth, gray. Leaves dark green above with impressed veins, paler beneath. Fruiting aments pendulous, yellowish green. Seed collected from several plants. Wild. Seed.

479339. JH-335-82. Japan. US National Arboretum. 51355. Collected October 09, 1982. Along Oirase, Yakeyama, Towada-machi, Aomori-ken, Honshu. 320m. Snow 2-3m, 58 days covered by 50cm or deeper. Minimum temperature -20C. Tree deciduous, 8m tall. Branches wide spreading. Bark smooth, gray. Leaves with impressed veins above, raised veins beneath. Fruiting aments pendulous. Growing in woodland along river. Seed collected from 3 plants. Wild. Seed.

479340. JH-395-82. Japan. US National Arboretum. 51413. Collected October 15, 1982. Foot of Mt Nyokoo, near Zyakko Falls, Nikko, Tochigi-ken, Honshu. 1050m. Tree deciduous, 7.5m tall. Bark smooth, dark brown. Leaves dark green above with impressed veins, glaucous beneath. Growing in woodland. Wild. Seed.

479341 TO 479342. *Carpinus laxiflora* (Siebold & Zucc.) Blume
(Betulaceae) Hornbeam.

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.

Received February 1983.

479341. JH-243-82. Japan. US National Arboretum. 51261. 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. Tree deciduous, 18.5m tall, erect with strongly ascending branches. Leaves dark green above, lighter and somewhat lustrous beneath. Growing in woodland near Hokkaido expressway. Wild. Seed.