

39983 to 39998.

From Jamaica Plain, Mass. Presented by the Arnold Arboretum. Received February 26, 1915. Collected in Japan by Mr. E. H. Wilson.

39983 to 39987. *ABIES* spp. Pinaceae.

Fir.

39983. *ABIES MARIESII* Masters.

Maries's fir.

Wilson No. 7595.

"A tree 40 to 50, occasionally 80, feet high, of compact, pyramidal form; young shoots very densely covered with red-brown down, which persists several years; buds small, globose, completely encased in resin. Leaves one-third to 1 inch long, one-twelfth inch wide; dark shining green and deeply grooved above; glaucous beneath, with two broad bands of stomata; apex rounded and notched. The lower ranks spread horizontally, whilst the upper shorter ones point forward and completely hide the shoot. Cones 3 to 4 inches long, about 2 inches wide, rounded at the top, egg shaped, purple when young; bracts hidden.

"Discovered on Mount Hakkoda, in Japan, by Charles Maries in 1878, and introduced by him at the same time. It is one of the rarest of silver firs, and scarcely a good tree exists in the country. I saw a small healthy specimen at Scone Palace in 1906. Two years later, in Mr. Hesse's nursery at Weener, in Hanover, I saw a healthy batch he had raised from seeds. I do not know that it has borne cones in this country. (The fir figured in the Botanical Magazine, t. 8098, is *A. webbiana*.) Maries's fir is best distinguished by the thick red-brown covering of down on the twigs." (*W. J. Bean, Trees and Shrubs Hardy in the British Isles, vol. 1, p. 123.*)

39984. *ABIES SACHALINENSIS* (Schmidt) Masters.

Fir.

Wilson No. 7613.

"A tree 130 feet high, native of northern Japan, Sakhalin, etc., but so liable to injury by late spring frost in this country as to be of no value. It has the *nordmanniana* arrangement of leaf, but in the forward-pointing leaves, which are three-fourths to 1½ inches long and very white beneath, it resembles *A. veitchii*; buds white, resinous. Cones 2½ to 3½ inches long. Introduced in 1878, by Maries, for Messrs. Veitch. I saw a tree about 16 feet high at Murthly Castle, near Perth, in 1906, but even there not in the best of health." (*W. J. Bean, Trees and Shrubs Hardy in the British Isles, vol. 1, p. 117.*)

39985. *ABIES SACHALINENSIS NEMORENSIS* Mayr.

Wilson No. 7869.

See S. P. I. No. 39860 for previous introduction and description.

39986. *ABIES UMBELLATA* Mayr.

Wilson No. 7707.

"*Abies umbellata* is quite closely allied to, and may be merely a form of, *A. brachyphylla*, but the leaves are more distinctly separated into two opposed sets, and the V-shaped opening left by the uppermost leaves is much wider; they are also longer (up to 1½ inches), the stomatic bands beneath are narrower and duller white, the apex is much more tapered, and the double points made by the notch are sharp, almost spiny. An interesting distinction is pointed out by Henry in the corrugation of the branchlets; in *A. umbellata* this is less apparent in the second and third years; in *A. brachyphylla* it is more pronounced. A cut branchlet bears a considerable re-