58635. CROTALARIA sp. Fabaceæ.

From Angola, Africa. Seeds presented by Merlin W. Ennis. Received February 2, 1924.

In our experiments with various plants introduced for cover crops we did not discover anything satisfactory, so we turned to the plants growing wild in this region. Among these was the "Elende clover," of which we are sending you seeds. This is a rather inconspicuous plant which grows in all sorts of places. I tried it first as a cover crop in the orange grove, in the hope that it might restrain the Bermuda grass. It not only smothered the Bermuda grass, but as it appears now in its second year it has made a very heavy stand. As the plant is well supplied with root nodules I believe that it will prove valuable as fertilizer. (*Ennis.*)

58636 to 58640.

From India. Seeds collected by Ralph R. Stewart. Received February 2, 1924. Field notes by Mr. Stewart.

58636 to 58639. RIBES spp. Grossulariaceæ.

58636. RIBES ALPESTRE Decaisne.

(No. 7376½. Sonamarg. August 22, 1922.) Collected at an altitude of about 8,600 feet. This is the only prickly Ribes in Kashmir, and it has very large fruits.

58637. RIBES GLACIALE Wall.

(No. 6743. Sonamarg. August 22, 1922.) A very hardy species, collected at an altitude of 10,000 feet. The fruit is not used.

A shrub, 10 to 15 feet high, with reddish young shoots, rounded leaves, and small flowers which are maroon or purplish on the inside. The small, scarlet, currantlike fruits mature in July in the higher altitudes of the Himalayas, where the species is native. (Adapted from *Janczewski, Monographie des Groseilliers, p. 467.*)

58638 and 58639. RIBES ORIENTALE Desf.

Unarmed, deciduous shrubs about 6 feet high distributed from eastern Europe to the Himalayas. The leaves are shining green and bristly below, the flowers are greenish red, and the small red fruits are covered with viscid hairs.

58638. (No. 7309. Sonamarg. July and August, 1922.) A hardy species, usually on dry, open banks, at an altitude of 7,000 to 9,000 feet.

58639. (No. 7385½. Matayan Dras, Ladak. August 29, 1922.) From an altitude of 10,000 feet.

58640. RUBUS SAXATILIS L. Rosaceæ.

(No. 7467. Baltal. September 3, 1922.)

According to Sir Joseph Hooker (Flora of British India), *Rubus saxatilis* is distributed throughout the Himalayan region, commonly at altitudes of 10,000 to 11,000 feet. The stems are short, erect, annual from a stout woody rhizome. The leaves are composed of three ovate, somewhat lobed, acutely double-toothed leaflets, each 2 to 3 inches long. The white flowers, half an inch in diameter, are followed by fruits composed of a few large scarlet drupelets. Judging by its distribution in Asia, this species should prove sufficiently hardy for cultivation in many parts of the United States. It is of interest mainly to plant breeders who are working with this genus.

58641. ABIES FORRESTII Craib. Pinaceæ. **Fir.**

From Yunnan, China. Seeds collected by J. F. Rock, National Geographic Society, Washington, D. C. Received February 5, 1924.

For previous introduction and descriptive note, see S. P. I. No. 58468.

58642. ABIES sp. Pinaceæ. **Fir.**

From Yunnan, China. Seeds collected by J. F. Rock, National Geographic Society, Washington, D. C. Received February 9, 1924.

For previous introduction and descriptive note, see S. P. I. No. 58469.

58643. FICUS CARICA L. Moraceæ. **Fig.**

From Saonara, Padova, Italy. Plants purchased from Fratelli Sgaravatii. Received February 9, 1924.

Dottato. Dr. Gustavus Eisen, long with this department and instrumental in bringing about the introduction of many fig varieties into the United States, describes Dottato as the best-known fig of Tuscany. A large proportion of the figs exported from Italy are of this variety. The tree is said to love rich, moist soils and is not suitable for dry lands. Under proper environmental conditions, it is a strong grower and heavy bearer of medium-sized fruits, oval-pyriform in shape, smooth, and yellowish green in color.

This well-known Italian variety is introduced for cultural and comparison tests by horticulturist engaged in fig-breeding experiments.

For previous introduction, see S. P. I. No. 56631.

58644. PASPALUM NOTATUM Fluegge. Poaceæ.

From San Jose, Costa Rica. Seeds purchased from J. Alfredo Quiros. Received January 30, 1924.

Bahia grass is a perennial grass forming a dense sward of leaves and with flowering culms about 1 foot high, two-branched at the top. It is native from Cuba and Mexico southward to Argentina. It is generally recognized as a very valuable pasture grass. The rootstocks are very stout, so that even on very sandy soil the grass makes a firm sod. At the Florida experiment station, Bahia grass is spreading year by year even into land already occupied by other grasses. In Florida the best germination has been obtained by sowing the seed the latter part of May and in June. A firm seed bed seems desirable.

Bahia grass has proved hardy throughout Florida and as far north as McNeill, Miss. It succeeds on nearly all types of soil, even on the sand hills, but best in fairly firm soils.

The ergot which attacks Dallis grass and many other species of Paspalum also affects Bahia grass. Indeed, in parts of Argentina where the pastures are largely of this grass the ergot causes a disease of cattle apparently the same as that caused by the same ergot on Dallis grass in Mississippi. It is not likely, however, that this ergot will ever be serious except perhaps in limited areas where Bahia grass or Dallis grass makes up the whole pasturage. (*C. V. Piper, Bureau of Plant Industry.*)

For previous introduction, see S. P. I. No. 51121.

58645. CLITANDRA ARNOLDIANA Wildem. Apocynaceæ.

From Kisantu, Belgian Congo. Seeds presented by Frère J. Gillet. Received February 5, 1924.

One of the commonest rubber-producing plants of the Belgian Congo, being found throughout the entire territory. It is a vine which becomes a foot in diameter and 250 feet in length, with leathery, narrowly oblong leaves. The rubber obtained from the latex of this species is black and of first quality. (Adapted from *Wildeman and Gentil, Lianes Caoutchoutifères du Congo, p. 80.*)

Introduced for rubber specialists.