

## 46080 to 46110—Continued.

46099. RUBIA CORDIFOLIA L. Rubiaceæ. **Madder.**

An herbaceous creeper with perennial roots, which is met with in the hilly districts of India from the northwestern Himalayas eastward and southward to Ceylon. The Manjit root or East Indian madder is obtained for the most part from this species and is much employed by the natives of India for dyeing coarse cotton fabric or the threads from which it is woven various shades of scarlet, coffee brown, or mauve. The East Indian madder of commerce consists of a short stalk from which numerous cylindrical roots, about the size of a quill, diverge. These are covered with a thin brownish pulp which peels off in flakes, disclosing a red-brown bark marked by longitudinal furrows. Many different methods are used for dyeing with this madder, a short account of which may be found in Watt, Dictionary of the Economic Products of India, from which this description is adapted.

For previous introduction, see S. P. I. No. 39656.

46100. SAMBUCUS ADNATA Wall. Caprifoliaceæ. **Elder.**

An ornamental perennial allied to the elderberry, with cymes of fragrant white flowers, 10 inches across, followed by bright-red fruits.

For previous introduction, see S. P. I. No. 41596.

46101. SAMBUCUS JAVANICA Reinw. Caprifoliaceæ. **Elder.**

"This is a very widely distributed species ranging from the Malayan Archipelago to central Japan and western China and also found in eastern Africa. It is characterized by the slender-pediceled flowers, the presence of conspicuous abortive flowers, and the very wide and loose inflorescence with the longer rays subthyrsoid. It has red fruits and shows a tendency to have the upper leaflets more or less adnate to the rachis and sometimes decurrent." (*Sargent, Plantae Wilsonianae, vol. 1, p. 307.*)

For previous introduction, see S. P. I. No. 39671.

46102. SAURAUJA NAPAULENSIS DC. Dilleniaceæ.

A medium-sized tree found at altitudes of 5,000 to 7,000 feet in the Himalayas. The young parts of the tree are covered with scurfy tomentum mixed with brown scales. The leaves, 10 inches long and 4 inches wide, are grouped at the ends of the branches and are oblong-elliptic in outline with deeply serrate margins. The pink flowers, half an inch across, occur in axillary panicles and are followed by green, edible, sweet fruits with mealy flesh. (Adapted from *Hooker, Flora of British India, vol. 1, p. 286.*)

46103. SOLANUM KHASIANUM C. B. Clarke. Solanaceæ.

An herbaceous perennial from the Khasi Hills in India, with stout stems densely covered with yellow hairs and having straight prickles two-thirds of an inch long. The leaves, 7 inches long by 5 inches wide, are deeply lobed, hirsute, and prickly on both surfaces. The flowers, nearly an inch broad, are borne in lateral 1 to 4 flowered racemes, and the globose fruits are an inch in diameter. (Adapted from *Hooker, Flora of British India, vol. 4, p. 234.*)

46104. SORBUS CUSPIDATA (Spach) Hedl. Malaceæ.  
(*Pyrus vestita* Wall.)

A deciduous tree which is a native of the eastern Himalayas and may be found growing from Gurhwal to Sikkim, at altitudes between 9,000