

## 45670 to 45691—Continued.

45678. *MALUS NIEDZWETZKYANA* Dieck. Malaceæ. **Apple.**

(Roots.) One of the most curious apple trees in the collection, *M. niedzwetzkyana* has deep purplish red flowers and fruit, even the flesh being purple, leaves purple (at least early in the season), and dark bark. It comes from central Asia and is probably a form of *M. pumila*, one of the parents of the common apple tree, as seedlings raised in the Arboretum have sometimes purple but more often green leaves. (Adapted from *Arnold Arboretum Bulletin of Popular Information No. 22.*)

45679. *MALUS PRUNIFOLIA RINKI* (Koidz.) Rehder. Malaceæ. **Apple.**

(Roots.) It is a tree in its wild state with greenish yellow fruit, sometimes with a reddish cheek, or rarely entirely red, rather longer than broad and not often more than 1½ inches in diameter; it is juicy and has an acid flavor. This tree was early introduced into Japan, where it was formerly cultivated in many forms as a fruit tree. Its cultivation in Japan was given up after the introduction of American and English apple trees and it is now a rare plant there. Judging by the climate where this tree grows naturally in western China, it should prove as hardy as the Siberian *Malus baccata*, which is one of the parents of the hardy race of apples now much cultivated in the extreme north as Siberian crabs; and it is not improbable that by crossing the Rinki with some of these hybrid crabs or with the hardiest varieties of the common apple a race may be obtained more valuable for the cold parts of North America than any of the apples which can now be grown in some of the Northern States and in the northwestern Provinces of Canada. (Adapted from *Arnold Arboretum Bulletin of Popular Information No. 3.*)

45680. *MALUS SYLVESTRIS* Mill. Malaceæ. **Apple.**

(Roots.) "A wild form of the cultivated apple secured in Turkestan." (*Sargent.*)

45681. *MALUS THEIFERA* Rehder. Malaceæ. **Apple.**

(Roots.) *Malus theifera* from central and western China is closely related to Hall's crab. It is one of Wilson's introductions through seeds sent in 1900 to Veitch and in 1907 to the Arboretum, where it is now 12 feet high. It has upright, spreading, rather zigzag branches which are densely studded with short spurs which bear numerous clusters of flowers rose red in the bud, becoming pale and almost white when fully expanded. In central China the peasants collect the leaves and from them prepare the palatable beverage which they call red tea. From this fact the specific name is derived. (Adapted from *Arnold Arboretum Bulletin of Popular Information No. 4.*)

45682. *MALUS TRANSITORIA TORINGOIDES* Rehder. Malaceæ. **Apple.**

(Roots.) This plant looks quite distinct from typical *Malus transitoria* with its larger, partly entire leaves and larger fruit and may turn out to be a distinct species, but as long as we do not know the mature fruits of the type and the flowers of this variety we must rely on the difference in the leaves, which is not sufficient for specific separation, as intergradations seem to exist. (Adapted from *Sargent, Plantae Wilsonianae, vol. 2, p. 286.*)