MUL/BERRY (OHG. mörberi, mürberi, Ger. Maulbeere, mulberry, from Lat. morum, Gk. μῶρον, möron, μόρον, moron, mulberry + berry, AS. beri, berige, OHG. beri, Ger. Beere, Goth. basi, berry), Morus. A genus of trees of the family Moraceæ, natives of temperate and warm climates, with deciduous leaves, unisexual flowers in short, thick spikes, the perianth of the female flowers becoming succulent and closing over the small pericarp to form with other flowers of the spike an aggregate fruit. There have been about 100 species described, but most authorshave reduced them to 10 or even less. The

common mulberry, or black mulberry (Morus nigra), a long-lived native of the middle parts of Asia introduced into cultivation in Europe more than a thousand years ago, and now naturalized there, is a low, much-branched tree, with thick, rough bark and broad, unequally serrated, and very rough heart-shaped leaves. It is not hardy in the United States as far north as New York, and is seldom seen except in the South and in California, where some of the improved varieties are grown. The fruit, which is purplish black, with dark-red juice, fine aromatic flavor, and subacid sweet taste, is often produced in prodigious quantities and is esteemed for dessert, for preserving, and for wine making. The wood is employed in cabinetwork, but is not of much value. The leaves are sometimes used for feeding silkworms. It is propagated by seed, suckers, layers, or cuttings, and succeeds best in a rich light soil. The white mulberry (Morus alba) has been planted in southern Europe since 1540, in India and China, where it is native, from time im-



RED MULBERRY (Morus rubra).

memorial for its leaves, which are the best food for silkworms. In North America it has been extensively planted and in places exists in a half-wild state as trees a foot or more in diameter. (See Kenrick, William.) The fruit is almost white, and much less palatable than that of the black mulberry, although there is great difference among the varieties. The best variety for feeding silkworms, on account of its rapid growth and abundant leaves, is that called the Philippine mulberry. A variety called the Russian mulberry is a hardy, rapid grower, well adapted to hedges, windbreaks, small timber, and ornamental plantings, for which purpose it has been extensively planted in the western United States. Morus multicaulis, by some considered a variety of Morus alba, once grown extensively in the United States to feed silkworms, is seldom seen now. In India the white mulberry is treated as a bush, and cut down twice a year, the stripped shoots being thrown away. Its bark has long been used in China and Japan for making paper. It grows Vol. XVI.—26

readily from cuttings. The root has a considerable reputation as a vermifuge. The red mulberry (Morus rubra), a native of eastern North America, ranging from New England to the Dakotas and south to southern Florida, is the largest tree of the genus, sometimes attaining in the South a height of 70 feet and 3 feet in diameter. It endures severe frosts much better than the preceding, and is therefore preferred for cultivation in some parts of Europe. Its fruit is deep red and almost as pleasant as the black mulberry. The wood is much more valuable, being fine-grained, strong, durable, and adapted even for shipbuilding. Of each of these three species there are numerous named varieties which are cultivated for their fruits, but they have not received the attention in the United States that they deserve. The Indian mulberry (Morus indica) has black fruit of a delicate flavor, and the leaves are extensively used for feeding silkworms in China, Cochin China, and Bengal. Morus alba; Morus celtidifolia and Morus corylifolia, Peruvian species; Morus lævigata, the species most common in the north of India; and Morus cashmeriana, probably a form of Morus indica, a native of Cashmere, produce pleasant fruit. Morus dulcis, a native of the north of India, is said to be superior in flavor to all others.

The paper mulberry (Broussonetia papyrifera and Broussonetia kampferi), a native of India, Japan, and islands in the Pacific, frequently planted for ornament and shade in America and Europe, differs from the true mulberry in having the female flowers collected in a globular mass. The fruit is oblong, dark scarlet in color, sweetish, but insipid. The tree is of moderate size, or, in cultivation, a bush 6 to 12 feet high with leaves either simple or lobed. The islanders of the Pacific cultivate this species with great care and make a kind of clothing from the bark. For this purpose branches an inch or more in diameter are macerated in water. The epidermis is then removed by scraping, and the inner bark beaten thin into kapa cloth. The young shoots are also used for paper making in Japan and the East. When the shoots are cut new ones spring up very rapidly. Silkworms eat the leaves. See Plate of MULBERRY AND LIQUIDAMBER, accompanying latter title.