

come woody, and your mignonette will no longer be an herbaceous plant, except at its upper extremities, which will bloom all the year, without interruption. It will be truly a tree-mignonette, living for an indefinite period—for with proper treatment, a tree-mignonette will live twelve to fifteen years.—*Parlor Gardener.*

The Black Knot.

The knots are now making their appearance on the plum and cherry trees, and require attention. Those who will make a careful examination of the excrescence will be able to find some marks upon them, sometimes crescent shaped, like the curculio mark upon the fruit. By a very careful dissection a minute white speck may be found in the middle of the concave portion of this crescent.—This is an egg of an insect. It is believed that the egg causes this excrescence, and we suppose so, because we know that this egg becomes a grub, and burrows in and feeds upon the substance of this knot. These grubs, if raised to maturity become beetles, so like the curculio that stings the fruit, as not to be distinguished from each other. Still they may be different. There are many different kinds of beetles that look much alike. The pea-bug and the beetle from the worm in the chestnut, both look much like the curculio, but differ greatly in their habits.

When we cut into one of the little balls found growing upon an oak leaf, and find there a full grown perfect fly, and no possible way it could have got there from without, we suppose that the parent of that fly, in some way or other, caused that ball to grow, and that it grew to afford protection and food for her young. This is a natural supposition, and is probably true, although it would be hard to prove. Acting upon such a theory as regards the black knot, we should say cut them off as soon as they appear, and you destroy the embryo insect that would cause similar knots another year.

We have seen both plum and cherry trees about this city, and indeed almost wherever we travel, perfectly deformed with these excrescences, and permitted to stand year after year, mere nurseries for spreading this evil.

Many people carefully cut off these knots early in the spring, and it is well enough to do so even then, as it certainly removes a deformity, but it then avails nothing towards getting rid of the cause.

By careful watching and prompt cutting away during the early part of July, you may keep the enemy under your control, but by neglecting them for a year or two, valuable trees, or even orchards, will become worthless.—*Newark Mercury.*

Botanical.

Notes on the Coniferous Plants of Japan

BY JOHN C. VETCH.

There is probably no country in the world of the same area which produces so great a variety of conifers as the group of islands composing the empire of Japan. From Nagasaki in the south to Hakodadi in the north, conifers are everywhere abundant, and in great variety. Travellers have hitherto been enabled to explore but an exceedingly small portion of the islands, and it seems more than probable that the numerous mountain ridges of the interior produce a great number of entirely new and yet undiscovered species.

The Japanese are great admirers of all evergreens, and much trouble is taken to cultivate them. The greater portion of the timber used for building and for all ordinary purposes is that of coniferous trees. The annual demand is enormous throughout all parts of the empire, and it is said that landowners are compelled to plant a certain number of forest trees yearly, in order to replenish the stock of the country. Conifers are employed very largely for garden decoration. Clipped hedges of the *Cryptomeria*, *Retinosporas*, *Biotas*, &c., are very general, and scarcely a garden can be met with that does not contain specimens trained and cut in grotesque forms. The main roads which intersect this country are very generally planted, either side with rows of conifers. *Picea densata* and *Masoniana*, *Cryptomeria japonica*, and *Thujaopsis dolabrata* are the most common kinds employed for this purpose. Trees thus planted are very seldom cut down, and consequently attain a great size, and form specimens of the utmost beauty.

Altogether conifers form the most useful and the most generally employed trees in Japan. Most of the kinds which have been discovered by travellers have now been introduced to European gardens, and there being every prospect the greater portion proving sufficiently hardy to withstand our severest winters, it is confidently hoped that ere long many of the beautiful species which are at present found in Japan only will be distributed throughout our pleasure-grounds and flourish as luxuriantly as they do in their country. Subjoined is a list of the principal species which have come under my notice, either in a wild state or cultivated in gardens. The Japanese names for the several species are given as far as can be correctly ascertained.

Abies Alcockiana: *Toraon-nomi*—A new tree, discovered in September, 1860, during Alcock's trip to the sacred mountain of Fuyama, and named in honour of that gentleman. It grows from 90 to 100 feet in height, at an elevation of 6,000 to 7,000 feet. The timber