



DENDROLOGY



Hackberry

ONE OF THE most widely distributed American forest trees, even though not an especially abundant one, is the hackberry. Its several New World species range from southern Quebec westward as far as Washington and Oregon and southward into Texas and Florida. On the Atlantic seaboard it is not very plentiful, but scattering specimens keep one reminded of its presence. Everywhere it prefers the deep rich soil of moist river terraces, though it will grow well in cultivation almost everywhere.

It is a really handsome tree, with straight, clean-cut trunk usually a foot or so in diameter, though occasionally reaching as much as three or four. The bark is unmistakable—rough, ridged, pebbly. No other tree has a bark quite like it. The twigs are fine and slender, often afflicted with the fungus disease known as witches' brooms. The leaves are more or less like those of the elm, to which the tree is rather closely related.

The hackberry is used occasionally as a street tree, although its trick of striving for height without a branching trunk does not make it a favorite for that purpose. No planting scheme should ignore it entirely, however, because it is one of the most characteristic of American trees.

Because of its scarcity in most parts of the country, it has but little use as lumber. The wood is heavy and soft, without much strength, but yields itself readily enough to working. It finds some utilization in the making of cheap furniture, boxes, loose barrels, and similar more or less lowly occupations. But it is better left alive than killed for such nondescript ends.

Science News Letter, September 2, 1933

BOTANY-ENTOMOLOGY

Australians Rout Cactus and Seek to Maintain Supremacy

PRICKLY pear cactus, until recently the despair of Australian agricultural administrators and scientists, is at last in full retreat, conquered by an insect brought in from the native home of the cactus, the arid regions of Mexico and the southwestern United States. The insect is a moth, known to entomologists as *Cactoblastis*. Its caterpillars have within the past three years brought to utter collapse most of the cactus in the states of Queensland and New South Wales.

From America

Prickly pear was introduced into Australia from America, and repeated the old story of an immigrant weed thriving more vigorously and making itself more of a nuisance than any native. In a vegetable way it was as bad as the famous rabbit pest of an earlier generation. It simply took possession of the best of the interior grain and grazing lands, until it had sixty million acres under its sway—almost as great an area as the whole of Great Britain and Northern Ireland. The situation looked desperate. Australian scientists sought natural enemies in the cactus lands of North America, and American scientists lent their aid. The search turned up *Cactoblastis*—and *Cactoblastis* did the rest.

Nevertheless, it is too early to consider the victory complete and final, the scientists warn. At least one species of cactus in Australia is not completely killed by the attack of *Cactoblastis*. The caterpillars destroy all overground growth, it is true, but this species has underground bulbs that can renew the growth. Whether the moth will linger behind in sufficient numbers to do a good "mopping-up" on these survivors of the enemy is not yet known. And there is also the possibility that some cactus species, hitherto of little account as a pest, may possess immunity to the *Cactoblastis* attack and thereby be qualified to move into the terrain vacated by its exterminated sister species.

Enemies of The Enemy

It is also known that *Cactoblastis* is exposed to the attack of enemies, principally parasitic insects that attack it in

egg, caterpillar or chrysalis stages. These have not been sufficiently numerous or active to check the beneficent insect during the great increase in its numbers which accompanied its major drive against the cacti, but they may catch up with it now that a reduction in food supply necessarily brings on a diminution in its numbers. Australian entomologists are seeking "secondary parasites"—enemies of these enemies of *Cactoblastis*.

Embattled Australian farmers may therefore be allowed three cheers, but they had better reserve the "tiger" until they are quite sure the enemy is finally and completely routed.

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Florida farmers are now growing all kinds of winter vegetables, since it was found that the trouble with these crops was a lack of manganese in the soil.

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