Exotic Plants in Forests: Supplementary Note

ROLAND M. HARPER

While my paper on this subject in the preceding number of TORREYA (31: 1-7) was in press, there appeared a monograph by Paul C. Standley on the Flora of the Lancetilla Valley, Honduras (Field Museum Publication 283—Bot. Series, vol. 10—418 pp., 68 pl., Jan 15, 1931), which contains some interesting observations on a similar problem in a tropical environment. Second-growth vegetation and weeds (including a few of the same species I listed from Lee County, Georgia) are discussed on pages 16-19, 35-38, 45, 88, and elsewhere; and on pages 27, 41-43, 281, and 316 the possibility of some of the plants found in dense forests and other apparently natural habitats being relicts from long-forgotten clearings is indicated.

The author states that fruit trees planted by the natives in their small clearings often persist for many years after the place is abandoned and grown up to jungle again, and then have the appearance of accidental introductions, though most of them (like the species mentioned in the last paragraph of my article) are unable to reproduce themselves. Three important fruit trees which are cultivated throughout Central America, namely, *Theobroma, Persea* and *Calocarpum,* grow in dense and apparently primeval forests on steep hillsides; but in such forests can be found many much-weathered fragments of pottery, which may indicate that the land was cultivated centuries ago.

Some of Mr. Standley's comments on this are worth quoting verbatim. On page 43 he says: "Is it unreasonable to suppose that hundreds of years ago these hills may have been cleared and planted with corn, just as they are being cleared today by the descendants of those aborigines? If these transient clearings are surrounded by virgin forest, will not the native plants at some time, after the clearings have been occupied by guamil [second-growth thickets], reseed them with forest species? Is it not possible that these cacao bushes and sapote and avocado trees are remnants of plantations of long ago?" He does not seem to mention fire, and very likely it is a negligible factor in the environment of that region, as in dense hardwood forests generally. But pine forests and savannas in the tropics, from all accounts, must be burned over about as frequently as those in temperate regions,

thus eliminating most weeds and cultivated plants from such habitats.

A study of the reversion of forests in New England, which touches on the same problem, was made by Dr. G. E. Stone about thirty years ago.[1]

The most abundant plant in the Palmyra cemetery, mentioned in my article, is the larger European periwinkle, *Vinca major.* It is rather a curious coincidence that another plant formerly put in the same genus, the so-called Madagascar periwinkle, *V. rosea* (now called *Ammocallis* by Small and *Lochnera* by Standley), is said by Standley (pp. 321-322) to be abundant in the cemetery at Tela, Honduras, and found in most cemeteries in Central America. That is a widely distributed tropical plant whose native country is unknown, and it is a common weed in southern Florida, but in northern Florida and southern Georgia it exists only in cultivation, especially in cemeteries; not in rich shady places like *V. major* and *V. minor,* but in sandy soils well exposed to the sun. Another favorite cemetery plant in Central America, according to Standley (p. 393), commonly cultivated in the United States also, is the African marigold, *Tagetes erecta,* which is called *"flor del muerto"* in Honduras.

TALLAHASSEE, FLORIDA

[1] Stone, G. E. Past and Present Floral conditions in Central Massachusetts. Rhodora 1: 143-148. 1899.