

only be averted by strict law enforcement and widespread education, especially among the youth."<sup>1</sup>

Thus it would seem that if we wish to get rid of the Crested Starling we should be able to do as well along that line as the Philippine boys and girls.—W. L. M.

**Introduction upon Introduction.**—Despite the risks involved, mankind persists in introducing plants and animals into new environments. The urge toward this policy no doubt arises in part from the great success that has attended the spread of man's indispensable satellites among cultivated plants and domesticated animals. Some unfortunate upsets in biotic relations have resulted from introductions even in the case of organisms generally dependent upon man for existence, but when we consider animals and plants not strictly domesticated, successful introductions have almost invariably had regrettable consequences. In numerous cases of this kind importation of enemies of the new pests has been resorted to in an effort to control them. Thus the process of introduction goes pyramiding with no man able to foretell the eventual results.

A recent paper on "The Introduction into Hawaii of Insects that Attack Lantana"<sup>2</sup> exemplifies this process in its most dangerous form—the introduction of vegetarian insects. The ornithological interest in the case is that the excessive spread of the Lantana plant in Hawaii which stimulated these introductions is attributed to dissemination of the pest by the Chinese Turtle Dove (*Turtur chinensis*) and the Indian Mynah (*Acridotheres tristis*). Observe that both of these are introduced birds, and that the Lantana plant is introduced, in fact that the root of the whole troublesome situation is ill-considered introductions.

The great spread of the Lantana plant followed primarily upon the introduction of the Turtle Dove, a bird said to be "without economic value, or rather, even if the Lantana question is left out, injurious to some extent." The Mynah "being also a voracious feeder on the berries aided the Doves in spreading the seeds far and wide." However, the Mynah was imported to control depredations of the grass army worm (*Spodoptera mauritia*) upon sugar cane and "certainly proved highly efficient in reducing these attacks." A good supply of the Lantana berries as well as of the army worms seem necessary to maintain an abundance of Mynahs, for when the crop of berries had almost entirely failed, owing to the insects imported for the purpose, the numbers of Mynahs in some areas were very greatly reduced and simultaneously there was some recurrence of outbreaks of the army worms.

One could scarcely ask for a more vivid illustration of the strict interdependencies of organisms. Man may feel competent to readjust them to his own benefit, but how often his touch upon the delicate web of biotic relationships changes it in a twinkling to a tangled skein.—W. L. M.

<sup>1</sup> Philippine Agr. Rev., 17, No. 2, 1924, p. 117.

<sup>2</sup> Perkins, R. C. L., and Swezey, O. H., Bul. Exp. Sta. Haw. Sugar Planters' Assoc., Ent. Ser. 16, Sept. 1924, 83 pp.