

Amber. Israella, Northern Muscadine, Union Village.—*Altered from Country Gentleman.*

A NEW PRINCIPLE IN PROTECTION FROM INSECT ATTACK.

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(Read before the Western New York Horticultural Society.)

Our more accurate writers in Economic Entomology, in the recommendations which they present for the arrest of insect depredations, have, of late, made a very proper distinction between *preventive* and *remedial* measures. If we construe an "insect attack" in its broadest sense, as a habit pertaining to a species of insect, of regularly attacking a plant or an animal, then its arrest at any time or in any manner, may properly be regarded as a remedy of the evil, and remedial measures would thus comprise preventive ones. But if we limit the "attack" to each separate periodical recurrence of the same, then it is possible by the interposition of preventives to preclude the attack and to render remedies unnecessary, and, indeed, impossible. In this latter sense, "remedies" imply that an attack has commenced: "preventives" that means are resorted to prior to the commencement of attack.

Of the latter, are such measures as change in crops, early or late planting, that may preclude the period of egg deposit, vigorous cultivation, selection of varieties which may be nearly or wholly exempt from attack, washes and coatings or other coverings, or the application of highly odorous substances to the object to be protected, or to the soil adjacent if it be a vegetable growth, to prevent the deposit of eggs.

While the preventives that have been proposed are comparatively few, the remedies could be enumerated by hundreds. Merely to specify a few,

we have the popular applications of Paris Green, London purple, hellebore and pyrethrum, in powder or in liquid form; carbolic acid, kerosene and other oils; soft soap and other alkaline washes, lime, ashes, soot, dust, salt, hot water, hand-picking, tree-jarring, burning infested twigs, attracting to fires, to lights, or to adhesive sweets—all tending to the destruction of insect life in one or more of its several stages.

It will readily be conceded that the use of preventives, wherever practicable, is more economical, more effective, and often more convenient than a resort to remedies.

We propose, at this time, to limit our attention to those means now in great favor, which consist of such applications to the soil or to the plant directly that promise a *safeguard against the deposit of insect eggs*.

The great benefit of commencing our efforts at this point is so obvious as to need no words to commend it. It would not be "nipping in the bud" or "crushing in the egg." It is prior to and beyond these. If no egg be deposited, we have no artfully concealed egg to search for, no larva, whose rapacity and destructiveness we must arrest; no pupa, whose retreat is to be discovered, and no imago, whose egg-distended abdomen is as fraught with evil as was that of the Trojan horse of old, to be captured or entrapped—in short, we have dispensed with the four insect stages that require such unwearied and unending investigation in order to ascertain the most vulnerable point of attack of insect life, and the best means with which to assail it.

Can the deposit of eggs be prevented?

It can be, and has been done with perfect success in many instances. Please accept my simple assurance of this, instead of occupying your time by citing instances in proof thereof.