ment which on physical grounds is possible, but scarcely practicable at the present time.

I wish to thank Prof. J. T. Randall and Dr. M. H. F. Wilkins for valuable discussions.

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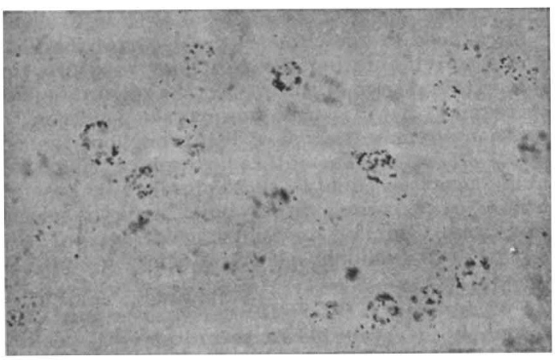
May 16.

[1] Hamilton, J. G., *J. Appl. Phys.*, 12, 440 (1941).
[2] Marshak, A., *J. Gen. Phys.*, 25, 275 (1941).
[3] Lindsay, E., and Craig, R., *Ann. Ent. Soc. Amer.*, 35, 50 (1942).

Osmophilic Granules in Chromatolytic Nerve Cells

W. A. STOTLER demonstrated at the sixtieth annual meeting of the American Association of Anatomists osmophilic granules in chromatolytic nerve cells ; an account of this has been published[1]. This interesting finding is in agreement with our observations during the past few years[2], that when using the Marchi reaction for degenerated fibres not only the degenerating myelin can be shown by the Swank-Davenport method, but also fine black granules in certain nerve cells.

Further experiments on this point strongly suggest that such a cell is one in which the metabolic processes are interfered with by cutting at some distant point its axon or its terminations. If this could be confirmed by other workers on the central nervous system, a valuable additional method of identifying interconnexions within the central nervous system would be available.



I illustrate my point by a photograph of several nerve cells of the lateral thalamic nucleus showing the black granules arranged in a ring-like formation around the cell nucleus. In this particular experiment, the motor cortex was removed on June 1, 1944, and the rabbit was killed on June 6, 1944 ; and in this instance the changes in the thalamus were shown after a short interval between the operation and death, while in other instances these changes could be seen even after a considerable period of time.

I should like to emphasize also that the large motor cells of cranial nerve nuclei contain after a certain interval of time chromophile granules after extensive cortical damage. This obviously cannot be explained by chromatolytic changes, and an explanation of this particular phenomenon has yet to be found.

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Oxford. May 19.

[1] *Anat. Rec.*, 97, 426 (1947).
[2] Following my paper, *Brain*, 66, 229 (1943).

Introduction of a Beetle from Trinidad into Mauritius to Control *l'herbe Condé* (*Cordia macrostachya*)

IN all periods of human history, inadvertently or deliberately, man has introduced plants or animals of one country into another. In some cases the consequence has been tragic, but in others his action has achieved the desired result. In the later Middle Ages the Arabs introduced into Europe many vegetables, some of which have become established ; spinach, for example. In the sixteenth century the Portuguese introduced many plants and animals from the Old World to the New and *vice versa*. In modern times, however, these introductions have been for a different purpose, frequently described as 'biological control'; by which is meant that man can use a natural enemy of an organism to cause its destruction for him. But this method has not always been successful because not all the factors that are involved in such transfers from one place to another are known, and, perhaps, not all of them can be completely known. But so far as they can be known, they ought to be taken into consideration.

My attention has been directed to the fact that a batch of *Physonota alutacea* Boheman (Cassidinæ, Coleoptera) has been recently introduced into Mauritius ; which, it is hoped, will eat *l'herbe Condé*—*Cordia macrostachya* Roem. and Schult.—to such an extent that its unimpeded propagation will be checked. It should be remembered that this plant itself has been accidentally introduced into Mauritius.

Physonota alutacea Boheman occurs in Mexico, Central America, Venezuela, Colombia and Ecuador. It has also been found in San Francisco, Trinidad and the Galapagos Isles.

Physonota and other related genera belong to the New World and do not occur in the Old World. The Old World genus which is equivalent to *Physonota* is *Aspidomorpha*, and this does not occur at all in the New World. *Physonota* and its allies correspond to *Aspidomorpha* and its allies in general structure and habits so remarkably that one cannot help feeling that they must have descended from a common ancestor. From this relationship I assume that whatever food habits one group may have the other group probably will have.

The cassidine beetles have been known to eat plants of 26 out of 320 families as shown in the tables of my book (not yet published) ; the greatest number occurring on the Convolvulaceæ and the Compositæ. The beetles of the genus *Physonota* actually eat the following plants—Compositæ : *Helianthus* (sunflower), *Sonchus* (sowthistle) ; Boraginaceæ : *Cordia macrostachya*. In addition to *Physonota*, other New World cassidine beetles (*Coptocycla adamantica* Germer and *Cistudinella obducta* Boheman) have also been found on *Cordia*. It is important to remember this, since it means that if one species shows a taste for *Cordia* there are others which will have the same taste.

In the Convolvulaceæ the genera most attacked by cassidine beetles are *Convolvulus* and *Ipomœa* (sweet potato), and both Old and New World species of the Cassidinæ have been found on them. Therefore, although *Physonota* has not been actually found on the plants of these two genera, it is quite probable that *Physonota* will eat them.

The Old World genus *Aspidomorpha* occurs on *Argyreia* and *Quamoclit*—two genera also of the Con-