

activity was usually low or erratic. At present, meaningful structure-activity relationships for hydrazine derivatives remain elusive but, because an increasing number of active compounds of this type is being reported, this group of chemosterilants may yet achieve its full potential.

A valuable source of leads for new types of chemosterilants arises from research on antineoplastic agents.^{11,12)} Although there is no direct relationship between chemosterilant and antineoplastic activity¹³⁾, the probability of finding sterilants in this important class of biologically active materials remains high. The sterilizing activity of the 9-(substituted-amino) acridines, compounds 11 and 12, and the bis (2,6-piperazine-dione), compound 10, further supports this thesis. Both classes of compounds have been reported to have antitumor activity.^{14,15)}

Summary

Eighteen compounds were effective chemosterilants when offered orally to adult house flies as additives in sugar or regular fly food diets. Sixteen compounds caused substantial reduction or complete inhibition of oviposition. Two dithiazolium salts (AI3-62814, AI3-62870) and the hydrazine-substituted 1,2,4-triazole (AI3-62547) were the most effective chemosterilants in the series. Several of the compounds may represent new classes of insect chemosterilants.

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新刊紹介

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人畜や野生動物に急性・慢性の毒性を現わし、環境を汚染した強力な殺虫剤はその製造を禁止されたり、使用を制限された。さらに各種の殺虫剤に対する抵抗性の害虫が各地に出現し、その対応に苦慮している。このような殺虫剤による害虫防除法に代る害虫の防除法の必要性が叫ばれ、各国で研究が進められている。本書では、天敵生物・ウイルス、不妊化法、性フェロモン、昆虫成育制御物質をとり上げ、最近の研究の成

果をそれぞれの分野のエキスパートがレビューしたものである。内容は次のとおりである。

M. Jacobson: Introduction, R. von den Bosch: Biological Control of Insects by Predators and Parasites, C. M. Ignoffo: Entomopathogens as Insecticides, W. Roelofs: Manipulating Sex Pheromones for Insect Suppression, A. B. Bořkovec: Control of Insects by Sexual Sterilization, J. J. Menn and F. M. Pallos: Development of Morphogenetic Agents in Insect Control.

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