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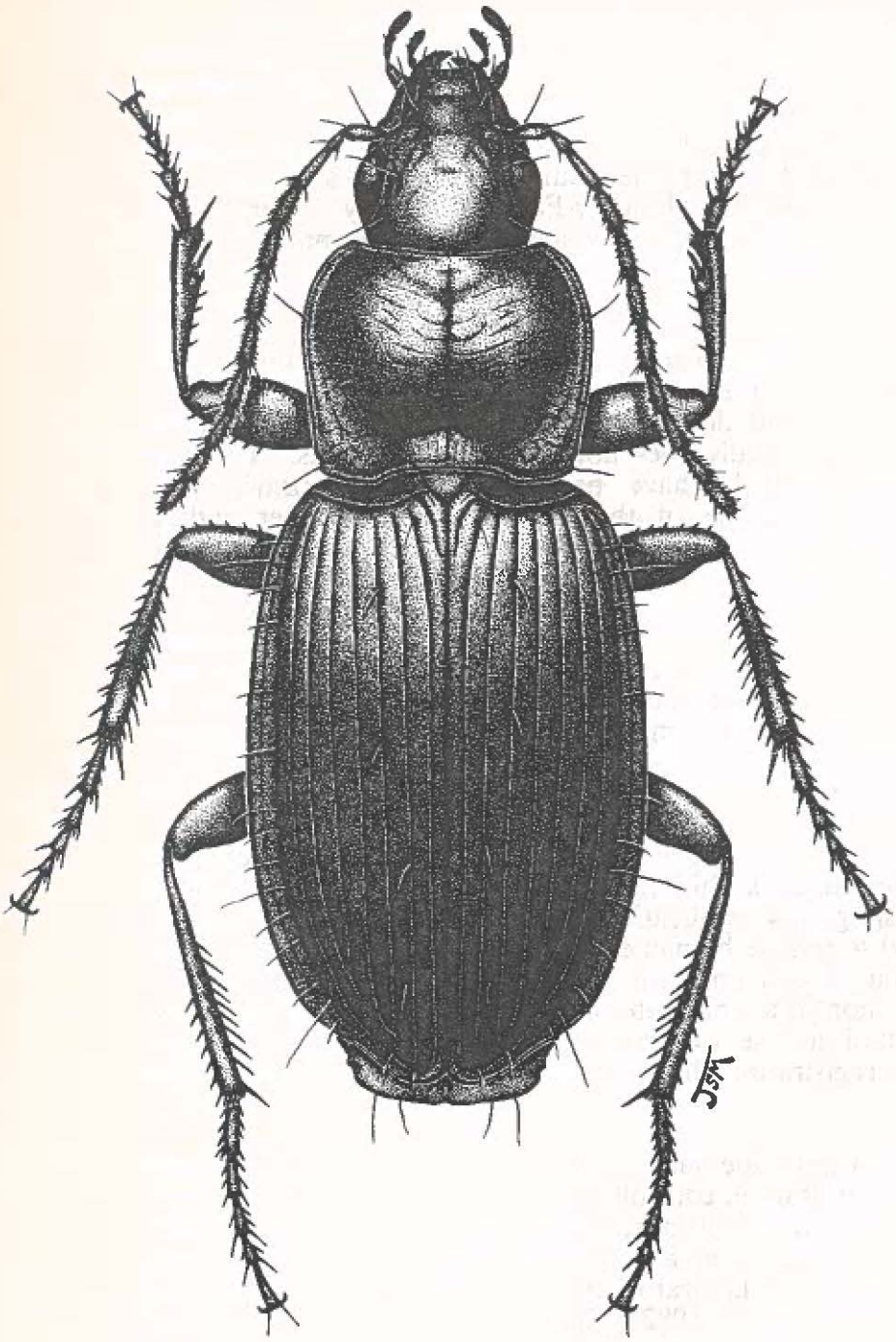


INSECT NOTES

GROUND BEETLES

Probably the most common insects outside the back door, around the light, waiting to come in are ground beetles. It seems to have been a good summer for them, there are lots of adult beetles around this fall! Because they often fly around outdoor and indoor lights, and have the look of a cockroach (or at least something undesirable), homeowners usually want to know what these critters are and how to control them.

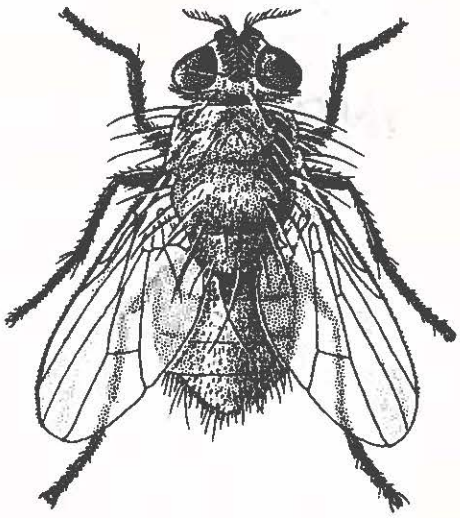
Adult and larval ground beetles feed on other insects. They live--well, on the ground/soil--and prey on a wide variety of other soil inhabiting insects. The immature stages go unnoticed in turfgrass, they frequently live in burrows in the soil and feed on caterpillars or other beetle larvae. The adults spend much time at ground level looking for similar food, but they often fly to lights (perhaps in search of food).

Issued in furtherance of Cooperative Extension work, Acts of May 8 and June 30, 1914, and September 30, 1977, in cooperation with the U.S. Department of Agriculture. Mitchell R. Geasler, Director, Virginia Cooperative Extension Service, and Vice Provost for Extension, Virginia Polytechnic Institute and State University, Blacksburg, Virginia 24061; Clinton V. Turner, Administrator, 1890 Extension Program, Virginia State University, Petersburg, Virginia 23803.

Ground beetles are usually gain pest status in the fall, when the adults of the population are most numerous and most active. They may enter houses through doors or windows and then proceed to drive a few folks crazy by repeatedly flying at a light or simply crawling around on the floor or wall--looking every bit like a cockroach! Ground beetles will not infest houses, and most of them will die there because of the low relative humidity.

Control of these insects is not usually necessary. A general spray of the lawn is not advisable, as the adults can fly from adjacent areas to outdoor lights. Perhaps an aerosol sprayed outdoors around a light would help reduce the numbers that enter the house. A fly swatter, close aim, and a strong arm will usually eliminate those that enter the house.

CLUSTER FLY CONTROL--NOW!



Yes, now is the time to think and do something about the cluster flies that have been a pest in the winter for the last several years. Although the adults are usually a pest in late winter (January-February), they enter house attics and wall voids during late summer. Now is the time to try (!) to control them.

Cluster flies enter attics and wall voids through small cracks and crevices in the outside of the house. They do not use gaps in screens and doors very much, so caulking those areas usually does not prevent infestations. The best results have been obtained by spraying the outside of the house in late summer with a residual insecticide (diazinon or dursban). The spray has to be aimed at the outside, and probably best at the sides of the house that face south. These insecticides will not last more than 7-10 days exposed to the elements, but that may be enough to deter or kill sufficient cluster fly adults to make the winter easier to endure.

CHLORDANE AND TERMITE CONTROL

Recently the EPA and Velsicol Chemical Co. (manufacturers of chlordane) announced that the sale of the termiticides chlordane and heptachlor will be stopped (voluntarily by Velsicol) while testing new application techniques procedes. The new application techniques are designed to reduce human exposure to these insecticides. EPA will delay proceedings toward cancellation until the tests results are evaluated. The process is expected to take about 9 months to complete. During that time professional pest control opertators will be permitted to use existing supplies of chlordane. Velsicol Chemical Co. intends to reapply for registration allowing some outside and preconstruction use of chlordane.

Chlordane has been used as a pesticide since 1948. As a termiticide it has been proven effective at 1% and 2% concentration in controlling subterranean termites for more than 35 years! These tests were conducted in Gulfport, Mississippi--a place that get 6 feet (count 'um--feet!) of rain a year. It has been a relatively inexpensive chemical that provides long protection against termites. In laboratory tests the cancer-causing aspects of this insecticide was inconclusive (WHO Report, 1982). Chlordane did cause a significant increase in the incidence of hepatocellular carcinomas (tumors) in one strain of white mice (the B6C3F1 strain!). Studies of long-term exposure to humans (at chlordane manufacturing plants) have not revealed any consistent or significant detrimental health effects.

EPA has worked hard to remove this long-term residual insecticide from use. Only recently have there been enough alternative termiticides available that EPA could consider cancellation of chlordane. Registered alternative termiticides include chlorpyrifos (Dursban TC), a moderately toxic organophosphate; isofenphos (Pryfon 6), a highly toxic organophosphate; and two pyrethroids: permethrin (Dragnet, Torpedo), considered by EPA to be a low potency tumor-causing agent. The concept with homeowners may be that chlordane was/is dangerous and cancer causing, and that the new termiticides are not. That is simply not true. The new termiticides can be expected to provide termite protection for about 15 years. Professional pest control operators will probably adjust their guarantees for termite control to 5 years, and be forced to nearly double to cost of control--to meet the significantly higher cost of the new termiticides.

The objective of the EPA effort is to find new techniques that will result in no detectable chlordane residues in houses! Houses will be treated with chlordane and monitored for 2 years. If chlordane residues are not detected in a house (after 120 days) treated with a particular method, Velsicol will be able to market a product for that use on condition that the house continue to be monitored and found free of chlordane for 2 years after application.

My View: Velsicol will work to produce a product and a method of appication that will result in no residue. This may end up being only pretreatment of new houses, but chlordane will remain available in the market place for the protection of structures from termites. I think several companies are working toward better formulations for termiticides--such as encapsulation and low-odor formulations.--Robinson

FRUIT FLIES

The small flies that seem to hover over the fruit bowl, the tomato canning apparatus, or the mellon that is over-ripening in the kitchen are probably fruit flies. They are rather small flies--about 1/8 in long--and with red eyes. They can very numerous this time of year; home canning activities and an abundance of ripe fruit indoors can bring a lot of flies, including fruit flies. It is easy for these pests to enter houses, as they can fit through some screens.

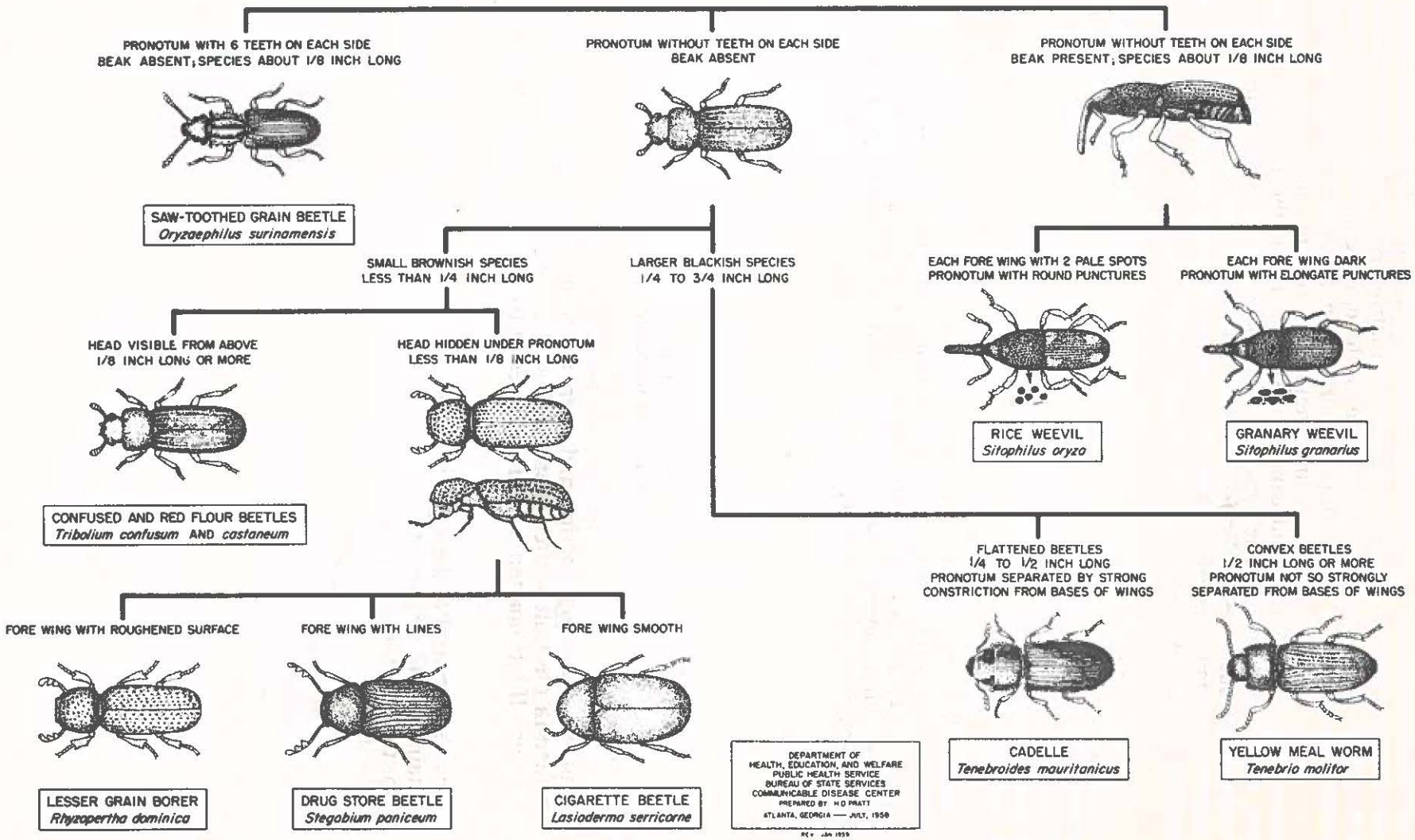
Fruit flies lay eggs on ripe and over-ripe fruit. The eggs hatch quickly and the maggots feed in the fruit. After about 10 days a new generation of flies emerges--and it starts all over. If left unattended, a few pieces of fruit can produce a large population of fruit flies.

Chemical control of these pests is probably unnecessary. Remove the damaged fruit from containers outdoors so that the flies will go elsewhere and not remain in the kitchen waiting for the next tomato to rot. Use an aerosol if necessary!.

William H Robinson
Extension Entomologist

PICTORIAL KEY TO SOME COMMON BEETLES AND WEEVILS

ASSOCIATED WITH STORED FOODS



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