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HOW TO DISTINGUISH BETWEEN THE CIGARETTE AND DRUG-STORE BEETLES
(COLEOPTERA: ANOBIIDAE)

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INTRODUCTION: THE CIGARETTE BEETLE, LASIODERMA SERRICORNE (FAB.), FIG. 1, AND THE DRUG-STORE BEETLE, STEGOBIUM PANICEUM (LINN.), FIG. 2, ARE THE MOST COMMON AND DESTRUCTIVE MEMBERS OF THE FAMILY ANOBIIDAE. THEIR HABITS AND GENERAL APPEARANCE ARE SIMILAR, AND THE TWO SPECIES ARE OCCASIONALLY CONFUSED THOUGH NUMEROUS DIFFERENCES EXIST.

ECONOMIC IMPORTANCE: BOTH SPECIES ARE GENERAL FEEDERS ON A WIDE VARIETY OF STORED ORGANIC MATERIALS. THEY MOST OFTEN ATTACK SUBSTANCES OF PLANT ORIGIN ALTHOUGH BOTH WILL FEED ON DRIED ANIMAL MATERIALS. THESE BEETLES CAUSE IMMENSE DAMAGE YEARLY IN WAREHOUSES, STORES, AND HOMES. THE CIGARETTE BEETLE IS PRIMARILY A PEST OF STORED TOBACCO AND IS THE MOST IMPORTANT INSECT ATTACKING THAT MATERIAL. IT ALSO ATTACKS SEEDS, PEPPER, SPICES, DRUGS, AND OCCASIONALLY GRAIN AND CEREAL PRODUCTS. THE DRUG-STORE BEETLE IS A MORE GENERAL FEEDER THAN THE ABOVE SPECIES. IT IS OFTEN FOUND IN DRUGSTORES AND THRIVES ON VARIOUS DRUGS, INCLUDING THOSE WHICH ARE VERY BITTER OR HIGHLY POISONOUS TO HUMANS. THE LARVAE ALSO ATTACK FLOUR, MEAL, SEEDS OF ALL KINDS, SPICES, NUMEROUS STORED FOODS, LEATHER, BOOKS, CORK, AND ARE EVEN KNOWN TO DAMAGE PINNED INSECT SPECIMENS.

DISTRIBUTION: COMMERCE HAS SPREAD BOTH SPECIES THROUGHOUT MOST OF THE WORLD. THE CIGARETTE BEETLE, HOWEVER, IS MORE ABUNDANT IN TROPICAL OR SUBTROPICAL AREAS THAN IS THE DRUG-STORE BEETLE.

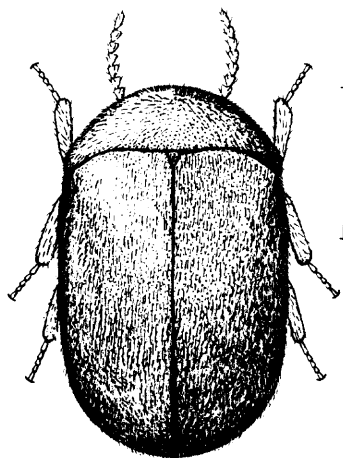


FIG. 1. LASIODERMA SERRICORNE (FAB.)
(LINE EQUALS 1 MM)

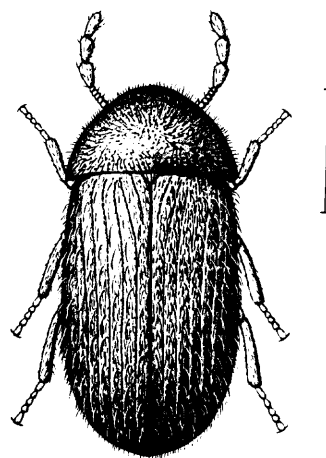


FIG. 2. STEGOBIUM PANICEUM (LINN.)
(LINE EQUALS 1 MM)

IDENTIFICATION: THE TWO SPECIES ARE READILY DISTINGUISHED. THE CIGARETTE BEETLE, FIG. 1, IS STOUT BODIED; THE ANTENNAE ARE SERRATE, NOT CLUBBED; THE ELYTRA LACK GROOVES; AND THE PUBESCENCE IS NOT OR JUST SLIGHTLY BRISTLING. THE DRUG-STORE BEETLE IS ELONGATE; THE ANTENNAE BEAR A THREE-SEGMENTED CLUB; THE ELYTRA ARE DISTINCTLY GROOVED; AND THE PUBESCENCE IS DISTINCTLY BRISTLING. IN ADDITION, THE DRUG-STORE BEETLE AVERAGES SLIGHTLY LARGER IN SIZE THAN THE CIGARETTE BEETLE. THE FORMER RANGES FROM 2.2 TO 3.7 MM IN LENGTH AND THE LATTER IS 1.8 TO 3.0 MM IN LENGTH.