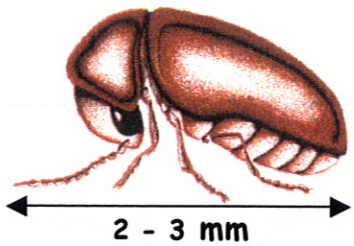
SAFESTORE™ | **FACT SHEET**

TOBACCO / CIGARETTE BEETLE
Lasioderma serricorne



DISTRIBUTION & HABITAT

The Cigarette or Tobacco Beetle *Lasioderma serricorne* has worldwide distribution, and despite its name, will infest stored commodities other than tobacco. The major economic losses from this species are in finished tobacco products, i.e. cigarettes and cigars. Both the adult and larval forms will attack tobacco, spices and various seeds. It is also a predominant pest of cocoa beans in Nigeria. Populations of the Tobacco beetle in cold climates are endemic to heated premises.

BIOLOGY

Adult *L. Serricorne* are between 2 and 4 mm long, squat in appearance, being compact and almost hemispherical. Red brown in colour, and showing a covering of fine hairs, *L. Serricorne* is relatively distinctive. Larval stages are very hairy and generally reach 4mm length. The female will lay between 20 and 100 eggs singly, within the food commodity over several days (@ 20°c). Hatch will generally occur at 1 week depending on conditions, larvae mature over 6 - 10 weeks to puparium stage where they will lie in a cocoon of food particles for 1 - 2 weeks until eclosion or adult emergence. The process from egg to adult takes between 8 and 13 weeks. Larvae become dormant and may hibernate below 60°F / 16°c.

Eggs are also laid in the folds of bundled tobacco in storage, never in fresh tobacco in the field. The open ends of cigars are also sensitive areas for oviposition (placing of eggs), where product quality may be severely and detrimentally affected. Generally however, they will not enter packaged product for ovipositor. Adults are strong fliers, and are particularly active in subdued light at temperatures above 65°F / 18°c.

SIGNIFICANCE AND PEST STATUS

Although *L. Serricorne* is primarily a pest of stored tobacco, other comodities are infested by this anobid, including pharmaceuticals, rodent baits and even pyrethrum powder "strong enough to kill cockroaches". The latter is due to a degree of resistance to natural pyrethrum. Books, and museum specimens are also at risk from *L. Serricorne* infestations. Large infestations have been documented where a severe overspill of adults have caused problems in the urban environment surrounding the industrial premises which are the centre of infestation, particularly during hot weather when the adults may take to the wing.

SAFESTORE™ INSTRUCTIONS

S.P.I. population monitoring kit contains ten "easy read trap" units, one tube of attractant pheromone gel, and a chart for record keeping.

Best results can be obtained by using the safestore system to set up a monitoring programme. When in place, such a programme can help you to identify when and where infestation problems will arise.

RECOMENDED: that a thorough inspection of the area involved is carried out, and potential infestation "hotspots" are identified and marked on a site plan or map. The position of the traps can be marked on this map when they are placed, to facilitate the reading of catch levels.

PREPARATION: simply squeeze 1 ml (approx 1cm bead) of the pheromone gel into the centre of the glue area inside the trap.

PLACEMENT: can affect the amount of insects that will be caught, so for an effective programme, it is important that the traps are placed in the best position available, and when they are replaced, the positioning is altered as little as possible so that information from different times of the year can be compared.

BEST POSITIONING: varies from site to site, so there is a certain amount of choice available in the placing of the traps, however good results can be obtained by following a few guidelines:

- If possible, positions should be chosen that offer shelter for the trap.
- Ensure that hygiene staff are informed of the programme to prevent trap removal.
- Mark the position of the traps on the site plan, and allocate them a number.
- Never store monitoring equipment with insecticides.
- Wash hands before placing or inspecting trap units.
- Avoid placing traps in areas where large volumes of air are moving out of the building.

REGULAR CHECKING: once per week is recommended, however it may be necessary to inspect more often if you have a zero insect tolerance policy.
The sensitivity of the area to be monitored dictates how often they should be inspected, but whatever frequency they are checked should be kept constant so that the records you keep can be compared to each other. A table to mark the records on is provided, and can be photocopied, completed and filed for future reference.

Trap units should be replaced every 4 - 6 weeks. Care should be taken during inspections to check the condition of the glue areas in the units, especially in dusty conditions or high insect catch situations, which may cause the glue surface to deteriorate. Should this occur, the trap should be replaced.