



Identification keys of storage pest: Red flour beetle- #Indiafoldscopephase 1

SOUMITRA BANERJEE

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CORRESPONDENCE:
sb4.foldscope@gmail.com

DATE RECEIVED:
November 27, 2018

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Infestation found in: Black cumin



Fig. Infested black cumin spice

Macrostructure image of infested pest:



Fig: Infested pest found in black cumin spice

Assumed pest: Red flour beetle (*Tribolium castaneum*)

Morphological characteristics (as observed under Foldscope)

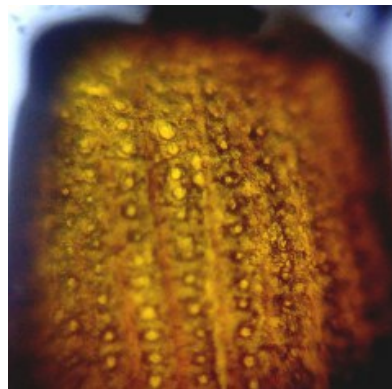
- Three-segmented antennal club and last three antennal segments larger than all others, almost

square (Fig. 1)

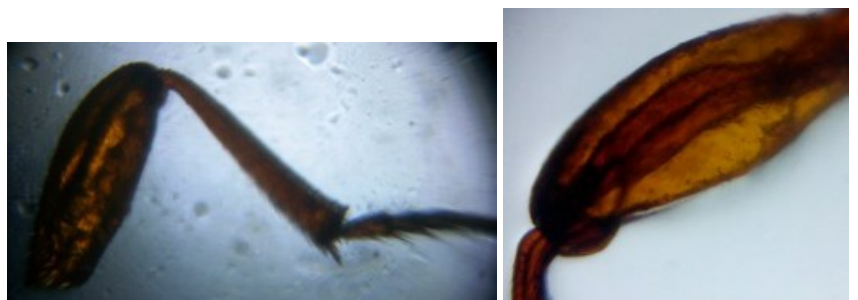
- Elytra with punctate, parallel-sided striations (Fig. 2)
- 4 segments in tarsus of hind leg (Fig. 3)
- Hind wing with folding lines and has dot like cells between the lines



Fig(1): Antennae of Red flour beetle under foldscope

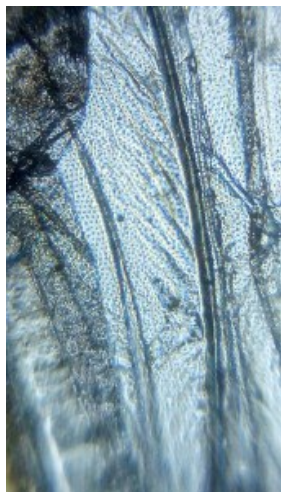
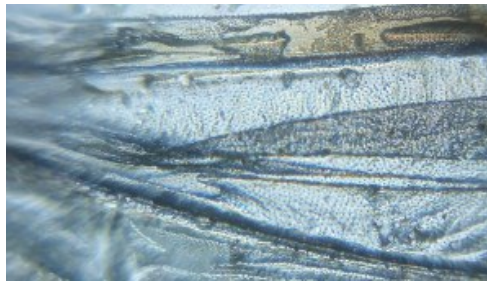


Fig(2): Elytra of Red flour beetle under foldscope





Fig(3) : Hind leg of Red flour beetle under foldscope



Fig(1): Hind wing of Red flour beetle under foldscope