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

SOUMITRA BANERJEE

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