

Two billbugs (*Curculionidae*; *Coleoptera*), first recorded from Iraq

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ABSTRACT

Two species of billbugs (family curculionidae; order Coleoptera) have been found attacked turfgrasses, here in Basrah province, South of Iraq, these are *Sphenophorus abbreviatus* and *Sphenophorus venatus vestitus* their description, illustrated and photos were done.

Keywords: Two billbugs; *Curculionidae*; *Coleoptera*; Iraq.

1. Introduction

Dryophthoridae, is a family of the order *Coleoptera*, contains many species characterized by having long snout, their individuals attack many type of vegetables and stored products, however, many could be attacked turfgrasses (Lyal, 2011; Shetlar & Andeon, 2012). The most famous genus of this family is *Sphenophorus Schoenher*, 1838. That including a round 71 species (Reinert et al. 2011), 64 of them occurred in North America (Niemczyk & Shetlar 2000; Vaurie 1951), and at least 9 species abundance in the warm seasons countries (mostly Palearctic regions) (Vittum et al. 1999; Morrill & Suber 1976; Layal 2011), most of them attacked turfgrass. This genus with its species distributed over the entire world particularly those countries with warm season and golf courses, for this reason abundance of these species in our countries seem to be rare in the past. But now and because of the free trade and the imported of the grass from many sources, infestation of our home garden, football stadiums with this pest appear.

2. Materials and Methods

An attention was coming from the managements officer of the Basrah football stadium, as an problem with the grasses was appear, a big circles of that grasses become yellow, immediately the team try to investigate the reason for this , a sample of grasses and soil were taking out.

In the lab, searching was done for any pest could be present, finally, many species with a long snout insects belong to the family *curculionidea* were found, all species were photographed (both all specimens and parts) with dissecting photographic microscope type Leica, preserved in 75-80% alcohol till the time for identification which based on many papers and keys.

3. Results

Results showed that there are two species of billbugs were found in Basrah attacks many types of grasses, these are *Sphenophorus abbreviatus* and *Sphenophorus venatus vestitus*.

3.1 *Sphenophorus abbreviatus*

Fig.1 shows the *Sphenophorus abbreviatus* (A:pronotum; B:elytra).

3.1.1 Description

No. of specimens = 10 (one female holotype), 9 (para type)

Length: 13.2-14.5 mm. Cuticle black, shiny or dull, with grayish pubescence; ventral surface of legs base bear an erect setae; anterior margin of prothorax bears completely dense and short bristles.

Its body elongate, head spherical, convex, eyes semicircular. Rostrum depressed laterally, robust, curved in the lateral view; base of rostrum thick. Scape strong, weakly curved, gradually widened from base to apex, slightly longer than funicle. Club strongly developed. Prothorax semirectangular, longer than wide, anteriorly narrowed. Surface of pronotum densely punctuated with small, round and superficial punctures. Scutellum visible. Elytra distinctly wider than prothorax, longer than wide, gradually narrowed from base to apex, not closed to abdomen. Legs strong, femora robust, tibiae long. Tarsi long, claw segment long, gradually and slightly widened from base to apex. Its claws divergent.

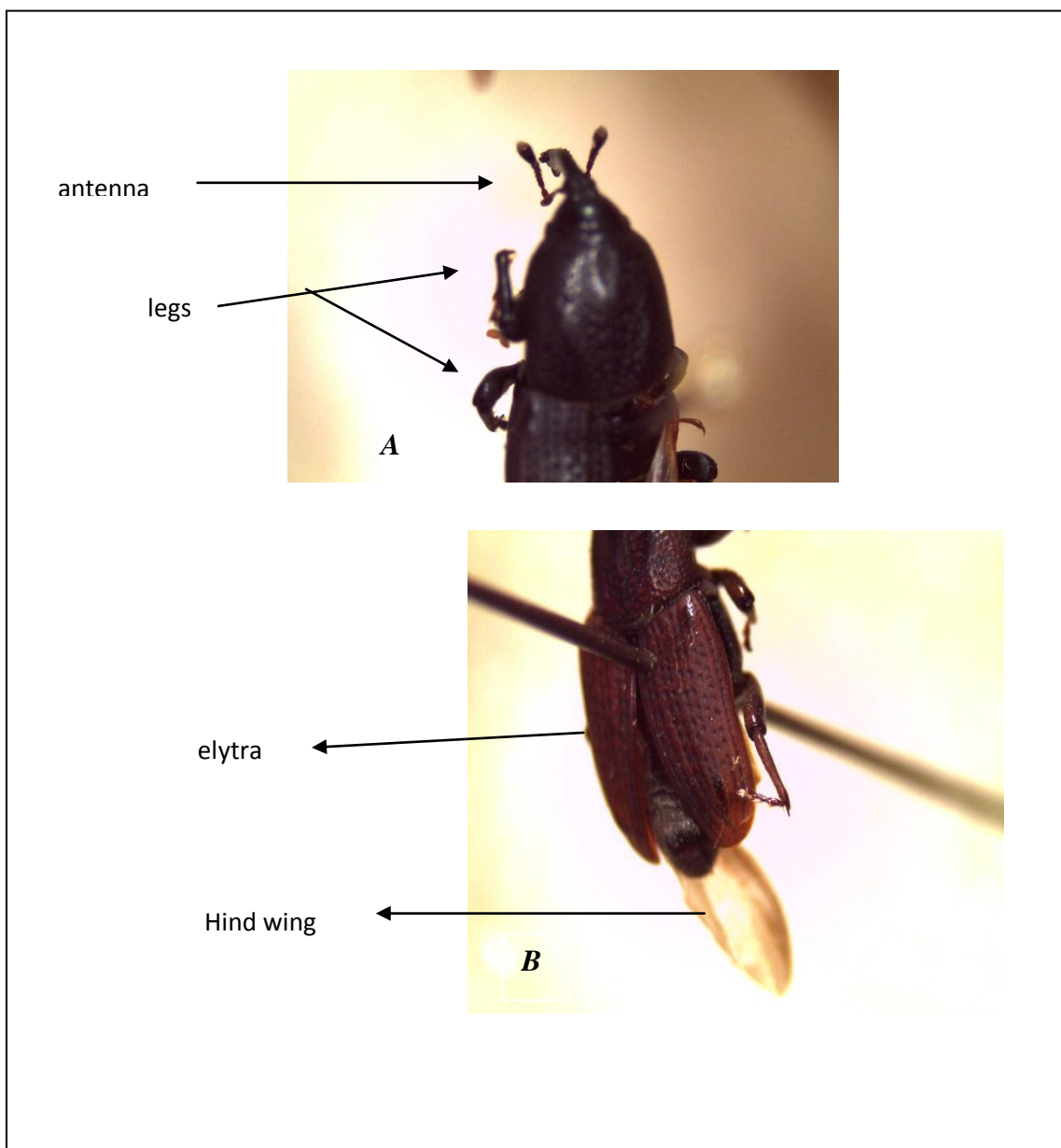


Fig.1. *Sphenophorus abbreviatus* (A: pronotum; B: elytra).

3.2 *Sphenophorus venatus vestitus*

Fig.2 shows the *Sphenophorus venatus* (A: pronotum with rostrum; B: pronotum and elytra).

3.2.1 Description

No. of specimens = 10 (one female holotype), 9 (paratype).

Adults with black to gray colour, sometimes in brownish colour due to covered with soil.

However, newly emerged adults coloured with reddish brown, length 6-11 mm. This species

distributed within wider area, they are abundance in Kansas, Texas, Florida, other gulf state and other area of United States, i.e. they found mainly in the warm-season area.

This species differ from the above one by having less dense of punctures in the pronotum with Y like shaped structure raised just behind the head, this area enclosed by The wings have longitudinal furrows.

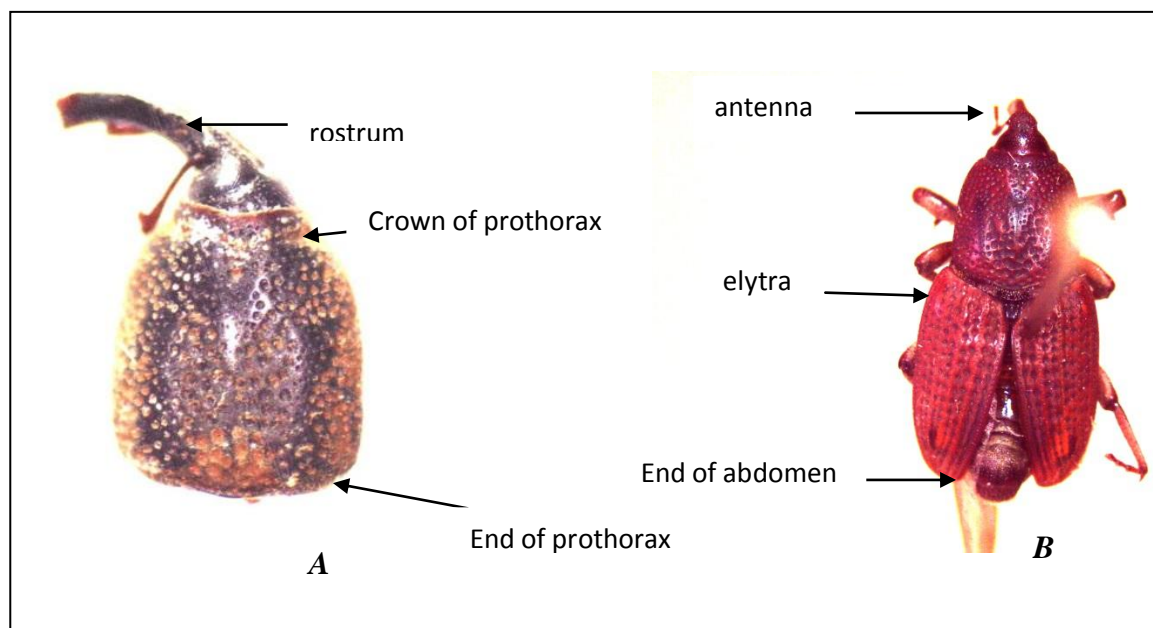


Fig. 2. *Sphenophorus venatus* (A: pronotum with rostrum; B: pronotum and elytra).

References

- Lyal, C. H. C., 2011. DryophanBiology thoridae, pp. 185-192. In: Catalogue of palaeartic Coleoptera . (I. Lobl and A. Smetana, editors). Stenstrup, Apollo Books, 7: 373.
- Morris, W. L. and Suber, E. F. , 1976. Biology and control of *Sphenophorus coesiformis* Gyllenhal (Coleoptera: curculionidae) in bahiagrass. J. Georgia entomol.Soc. 11:283-288.
- Niemczyk, H. D. and Shetlar, D. J. 2000. Destructive Turf Insects, 2nd ed. H.D.N. Books, Wooster, Ohio.
- Rienert, J. A., Engelke, M. C. and Heithalt, J. J. 2011. Hunting Billbug (Coleoptera: Curculionidae) Resistan Ce among zoysiagrass (zoysia spp.) cultivars.
- Shetlar, D. J., Andon, J. E., 2012. Billbugs in turfgrass. Fact sheet entomology HYG-2502-12, The Ohio state University Extension.
- Vittum, P. J., Villani, M. G., and Tashiro, H. 1999. Turfgrass Insects of the united States and Canada. Cornell Univ. Press, Ithaca, NY, 422 pp.
- Vurrie, P.1951. Revision of the genus *Calendra* (formerly *Sphenophorus*) in the united states.