

I N T R O D U C T I O N

The family Silvanidae belongs to the section Clavicornia of the superfamily Cucujoidea under the suborder Polyphaga (Coleoptera : Insecta). This is a moderately large family and closely related to the family Cucujidae. The representatives of the family Silvanidae are commonly known as "flat bark beetles"; some are called "saw-toothed grain beetles"

[Oryzaephilus surinamensis (L.)], "merchant grain beetles"

[Oryzaephilus mercator (Fauvel)], "foreign grain beetles"

[Ahasverus advena (Waltl)] and "square-necked grain beetles"

[Cathartus quadricollis (Guérin-Méneville)]. The silvanids are small (1.35-4.50 mm in length), flat, usually reddish brown and rarely spotted and elytral puncturations are arranged in rows. Distinct superficial diversity is exhibited by adult silvanids and some are often confused in preliminary observations as they resemble members of other families namely, Cucujidae, Cryptophagidae and a few Languriidae. The family Silvanidae can be recognised by its tarsal formula being 5-5-5 in both sexes with penultimate segment smallest, front coxal cavities broadly closed behind externally, mesocoxal cavities opened outwardly; antennae usually short, thick and distinctly clubbed or maxillary palpi securiform or elytra often with a scutellary striole.

Silvanidae include a few well-known insects that attack almost every stored food products of vegetable origin. Despite its economic importance and abundance in India no comprehensive work on this group from India has ever been published. As regards survey and systematic studies on the Indian Silvanidae nothing further is known since Grouvelle (1903-1919). All these facts taken into consideration a project on study of the Indian Silvanidae has been undertaken in 1974. For this study the author and the staff of Coleoptera Section of Zoological Survey of India made several surveys to different parts of India especially, North-East India, North-West India, and South India during 1974-1977 and collected about 3000 examples. Moreover, collections of the different Museums of India and abroad have been studied. The above material is representing 62 species under 13 genera, of which 24 species are new to science. Descriptions of the larvae of Silvanoprus angusticollis (Reitter), Protosilvanus lateritius (Reitter), Ahasverus advena (Waltl), Cathartus sp., Airaphilus serricollis (Reitter), Psammoecus bipunctatus (F.) and Cryptamorpha brevicornis (White) are made. The aim of the present investigation is first to explore the Indian silvanid fauna, second to improve the definition and characterization of the family, genera and species and to provide keys to the subfamilies, genera and species, and third to find out the interrelationships of the genera and species. Moreover, the present study includes many information about habits and habitats of the Indian Silvanidae.