

# Contribution to the knowledge of Curculionoidea (Coleoptera) and their host plants in Israel

by Josef Halperin and Jan Fremuth

**Abstract.** One hundred and thirty-five species of weevils, 94 of them new to the Israeli fauna are listed, and are annotated according to their host plants, regional distribution, flight period and frequency in Israel.

**Kurzfassung.** Die Liste führt 135 Arten von Rüsselkäfer auf, wovon 94 Arten neu für die Fauna Israels sind. Dazu werden Angaben zu ihren Brutpflanzen, zur regionalen Verbreitung, zur Flugperiode und zu ihrer Häufigkeit in Israel mitgeteilt.

**Key words.** Weevil, Levantine, distribution, faunistics, taxonomy, host plants.

Weevils, Curculionoidea Latreille, 1802, the largest insect group, comprise about 50,000 species worldwide, of which an estimated 300 occur in Israel. The apodic larvae of this phytophagous family feed mostly inside or, rarely, on the surface of different parts of plant tissue; some inhabit the soil, feeding on roots. The adults feed mostly on leaves. Some species are gall-formers, leaf miners or inhabit decayed wood. Some are noxious, causing damage to agricultural plants.

The first and the only checklist of the weevils in Israel was compiled by BODENHEIMER (1937). Several authors have reported the association of weevils with their host plants: BYTINSKI-SALZ (1954) – desert acacias; GERLING & KUGLER (1973) – tamarisks, *Prosopis farcta*, *Convolvulus arvensis*, *Sorghum halepense*; HALPERIN (1963, 1986) – eucalypts, pistachio and laurel; AVIDOV & HARPAZ (1963) and RIVNAY (1962) – species noxious to field crops; KUGLER (1989) - various plant species; KEHAT (1999) – exotic species noxious to date palms.

This checklist is based mostly on material collected (and sometimes reared) by the first author since 1980, mainly on the foliage of woody and perennial plants. This may also explain why there are few records related to annual host plants. The identification (with some exceptions) was made by the second author, and part of the material is kept in his collection. Three species remain undetermined; they are probably new to science and will be described in due time. Most of the specimens will be deposited in the National Collection of Insects, Department of Zoology, Tel Aviv University, Tel Aviv, Israel. Species new to the Israeli fauna are indicated by an asterisk (\*).

The list provides information on insect species; host plants (dubious hosts are in brackets); regional distribution (numbered as on the attached map); months of the collection of beetles, or their emergence from the host plant (marked by Roman numerals); frequency of capture [rr - very rare (1–4 records); r - rare (5–10 records); c - common (11–24 records); cc - very