



## An annotated check list of flat bugs (Hemiptera: Aradidae) from Vietnam

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### Abstract

The flat bugs reported so far from Vietnam are cataloged. Altogether, 46 species of 5 subfamilies (Aneurinae, Aradinae, Calisiinae, Carventinae, Mezirinae) and 25 genera have been recorded for the Vietnamese fauna to date. Synonyms and distribution of each species are given. The type information for species originally described from Vietnam is provided.

**Key words:** Aradidae, checklist, Vietnam

### Introduction

The Aradidae, commonly called flat (or bark) bugs, are a cosmopolitan family of pentatomomorphan bugs comprising eight subfamilies, about 250 genera, and 1957 species (Kormilev & Froeschner 1987; Zoological Record 1987–2010). Modern interpretations of the suprageneric classification of the family are largely derived from the great work of Usinger & Matsuda (1959). The knowledge of the Aradidae fauna of Vietnam is still very poor. Only 46 species of 25 genera of Aradidae are known so far from Vietnam (Bergroth, 1887, 1889, 1892, 1914; Blöte, 1965; Heiss, 2001, 2010; Hsiao, 1964; Kormilev, 1955, 1957, 1967, 1968, 1969, 1970, 1971, 1972, 1973, 1983; Kormilev & Heiss, 1976; Kormilev & Froeschner, 1987; Le *et al.*, 2009; Mai *et al.*, 1976; Vászárhelyi, 1976, 1980, 1988, 1990; Yan *et al.*, 2007; Zhang *et al.*, 2010). *Eumenotes obscurus* Westwood has been listed as an aradid from northern Vietnam (Nghe An) by Mai *et al.* (1975); actually, this true bug belongs to the family Pentatomidae. For further studies of Vietnamese flat bugs, we summarize the aradid taxa known from the country in the present paper.

### Material and methods

This study is based on all available literature data published, treating Aradidae of Vietnam. Synonyms and distribution of each species are given. The type information for species originally described from Vietnam is provided. All taxa are listed alphabetically. Abbreviations of depositories are as follows.

BPBM	Bernice P. Bishop Museum, Honolulu, Hawaii, U.S.A.
CAU	China Agricultural University, Beijing, China
CEHI	Collection Ernst Heiss, Innsbruck, Austria
HNHM	Hungarian Natural History Museum, Budapest, Hungary
MNHN	Muséum National d'Histore Naturelle, Paris, France
USNM	United States National Museum of Nature History, Washington, D. C., U.S.A.
ZMAS	Zoological Institute, Russian Academy of Sciences, St. Petersburg, Russia
ZMPA	Zoological Institute, Polish Academy of Sciences, Warsaw, Poland.