

NEW LOCALITIES AND ONE NEW SPECIES OF JUMPING SPIDERS (ARANEAE: SALTICIDAE) FROM NORTHERN VIETNAM

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ABSTRACT. – New localities of 13 species of jumping spiders, including one new species, *Evarcha bicuspadata*, are supplied based on specimens collected from northern Vietnam in 2000. Detailed morphological description and figures of body and palpal organ of the new species are given. Differences between the new species and related species are discussed.

KEY WORDS. – Arachnida, Araneae, Salticidae, taxonomy, Vietnam.

INTRODUCTION

Jumping spiders (Salticidae) are the most diverse spider family in Vietnam (Platnick, 2002). Taxonomy of Vietnamese salticids was studied most thoroughly by Zabka (1985). He described 100 species including 51 new species, and 8 new genera. After 1985 only few studies on jumping spiders of Vietnam were carried out. Recently, the authors had the chance to make an expedition in Northern Vietnam during 4-24 December 2000. This survey conducted from Ha Giang to Cao Bang Provinces, then along Lang Son Province to Hanoi. During 22-24 December we worked in the research station of Hanoi University in Son Toy Province, which is located about 70 kilometers north of Hanoi. Considering the special signality of the Vietnamese fauna, we have already published some results of our research. In the present paper 13 species of jumping spiders were reported, including one new species.

The specimens used in the present study are deposited in the Institute of Zoology, Chinese Academy of Science (IZCAS) and the Zoological Reference Collection (ZRC) of the Raffles Museum of Biodiversity Research, National University of Singapore. Measurements are given in millimeters.

TAXONOMY

Bianor angulosus (Karsch, 1879)

Material examined. – 2 males (IZCAS), Quang Hoa, Cao Bang Province, Vietnam, 19 Dec.2000.

Distribution. – Vietnam (Quang Hoa, Cao Bang Prov.), China, Bangladesh, Myanmar, Indonesia, India, Sri Lanka.

Bianor maculatus (Keyserling, 1883)

Material examined. – 1 male (IZCAS), Tan Linh Village, Bavi District, Son Tay Province, Vietnam, 23 Dec.2000.

Distribution. – Vietnam (Tan Linh Village, Bavi District, Son Tay Province), Australia, New Zealand, New Caledonia, Samoa, China.

Bristowia heterospinosa Reimoser, 1934

Material examined. – 1 female (IZCAS), Viet Lann Village, Ha Giang Province, Vietnam, 10 Dec.2000.

Distribution. – Vietnam (Viet Lann Village, Ha Giang Province), Korea, Indonesia, China, Japan.

Burmattus pococki (Thorell, 1895)

Material examined. – 1 male (IZCAS), Tab Linch Village, Son Tay Province, Vietnam, 24 Dec.2000; 1 male (IZCAS), Gao Bao Village, Ha Giang Province, Vietnam, 9 Dec.2000; 1 male (ZRC), Viet Lann Village, Ha Giang Province, Vietnam, 10 Dec.2000.

Distribution. – Vietnam (Tab Linch Village, Son Tay Province; Gao Bao Village, Ha Giang Province; Viet Lann Village, Ha Giang Province), Burma, China, Japan.

Carrhotus sannio (Thorell, 1887)

Material examined. – 1 male (IZCAS), Tab Linch Village, Son Tay Province, Vietnam, 24 Nov.2000; 1 female (IZCAS), Viet Lann Village, Ha Giang Province, Vietnam, 10 Dec.2000; 1 male, 1

female (IZCAS), Quang Hoa, Cao Bang Province Vietnam, 18 Dec.2000; 1 male, 1 female (ZRC), Tan Linh Village, Bavi District, Son Tay Province, Vietnam, 12 Dec.2000; 1 male (IZCAS), Sac Ha Village, Cao Bang Province, Vietnam, 17 Dec.2000.

Distribution. – Vietnam (Tab Linch Village, Son Tay Province; Viet Lann Village, Ha Jiang Province; Quang Hoa, Cao Bang Province; Sac Ha Village, Cao Bang Province), India, Burma, Malaysia, China, Indonesia.

***Chinattus validus* (Xie, Peng & Kim, 1993)**

Material examined. – 1 male (IZCAS), Van Hoa Village, Bavi District, Son Tay Province, Vietnam, 23 Dec.2000.

Distribution. – Vietnam (Van Hoa Village, Bavi District, Son Tay Province), China.

***Evarcha bicuspidata*, new species**
(Fig. 1)

Material examined. – Holotype - male (IZCAS), Viet Lann Village, Ha Jiang Province, 10 Dec.2000.

Paratype ♂ 1 male (IZCAS), same data as holotype.

Diagnosis. – The new species can be easily recognized by the following combination of characters: Embolus short, claw-shaped, originating at the distal edge of bulb; tegulum almost circular, with a posterior lobe; tibial apophysis with

two prongs, the dorsal one thinner and longer; body with distinct transverse marks. The new species is closely related to *Evarcha humanensis* Peng, Xie & Kim, 1993, but differs in: 1) embolus of the new species much thinner and lacking membranous structure found in that of *E. humanensis*; 2) tibial apophysis with two prongs in the new species, but with bifurcated tip in *E. humanensis*; 3) carapace of *E. humanensis* lacking distinct marking found in that of the new species.

Measurements. – Total length 3.60. Carapace length 1.80, width 1.40; abdomen length 1.60, width 1.00; anterior eye row width 1.30, posterior eye row width 1.25, anterior median eye (diameter) 0.40, anterior lateral eye 0.23, posterior lateral eye 0.20, length of ocular area 1.25, height of clypeus 0.15. Leg I total length 3.10 (femur 1.00, patella + tibia 1.20, metatarsus 0.50, tarsus 0.40); leg II 2.70 (0.90, 1.00, 0.40, 0.40); leg III 3.65 (1.20, 1.25, 0.70, 0.50); leg IV 3.55 (1.10, 1.25, 0.70, 0.50); leg formula III, IV, I, II.

Description of male. – Carapace (Fig. 1A) dark brown, ocular area darker; covered with dark brown and white hairs, black setae sparse; there are two pairs of yellowish brown transverse bands on thoracic area; fovea short and black; cervical and radial grooves indistinct. Sternum elongated oval, convex, yellowish brown with black margin, clothed by short brown hairs and long white ones. Clypeus dark brown, very narrow, densely clothed by long white hairs. Chelicerae short and strong, dark brown, anterior side with black lines; two promarginal teeth and one retromarginal, clothed by long brown hairs. Endites and labium dark brown, distal areas yellowish brown with long dark brown hairs.

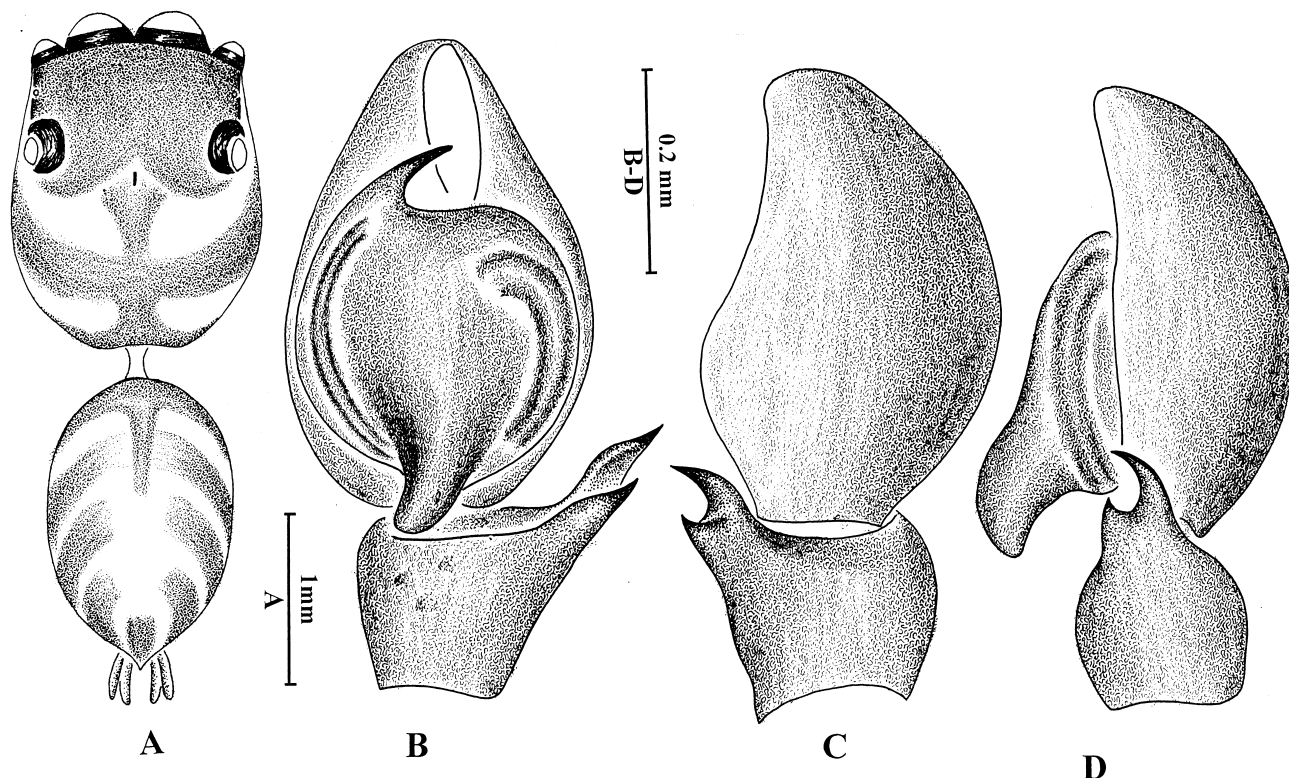


Fig. 1. *Evarcha bicuspidata*, new species. A. Body of male; B. Left palpal organ, ventral view; C. Left palpal organ, dorsal view; D. Left palpal organ, retrolateral view.

Legs dark brown, with distinct yellowish brown annuli; clothed by black and white hairs; spines long and strong, tibia I with 2 pairs of ventral spines, ventral side of tibia II with 2 promarginal spines and 3 retromarginal; metatarsi I and II with 2 pairs of ventral spines each.

Abdomen oval. Dorsum (Fig. 1A) clothed by short brown hairs and long white ones; yellowish brown with distinct marks; cardiac mark looks like an elongated longitudinal band; lateral sides with 4 pairs of dark brown transverse bands; posterior end with a black mark. Ventral side light yellow, 3 grayish black longitudinal bands on median and lateral areas. Spinnerets grayish black, clothed by grayish black hairs.

Palp (Figs. 1B-D): Cymbium short and wide; sperm duct clearly visible, its prolateral part thinner and longer; bulb lobe stout and slightly conical; two prongs of tibial apophysis horn-shaped, dorsal prong longer and slightly thinner.

Etymology. – The specific name is derived from the shape of tibial apophysis. bi- (Latin prefix) means two, cuspidata means sharp end; bicuspidata refers to the two-pronged tibial apophysis.

***Evarcha flavocincta* (C. L. Koch, 1846)**

Material examined. – 1 female (IZCAS), Tab Linch Village, Son Tay Province Vietnam, 24 Nov.2000; 1 male (IZCAS), Ha Jiang Town, Ha Jiang Province, Vietnam, 8 Dec.2000; 1 female (IZCAS), Viet Lann Village, Ha Jiang Province, Vietnam, 10 Dec.2000; 1 female (ZRC), Son Tay Province, Bavi District, Tan Linh Village, Vietnam, 23 Dec.2000.

Distribution. – Vietnam (Tab Linch Village, Son Tay Province; Ha Jiang Town, Ha Jiang Province; Viet Lann Village, Ha Jiang Province), China to Java.

***Evarcha pococki* Zabka, 1985**

Material examined. - 3 males (IZCAS), Viet Lann Village, Ha Jiang Province, Vietnam, 10 Dec.2000.

Distribution. – Vietnam (Viet Lann Village, Ha Jiang Province), Bhutan, China, Indonesia.

***Harmochiratus brachiatus* (Thorell, 1887)**

Material examined. – 1 female (IZCAS), Viet Lann Village, Ha Jiang Province, Vietnam, 10 Dec.2000; 1 female (IZCAS), Ha Jiang Town, Ha Jiang Province, Vietnam, 8 Dec.2000; 1 female (IZCAS), Gao Bao Village, Ha Jiang Province, Vietnam, 9 Dec.2000.

Distribution. – Vietnam (Viet Lann Village, Ha Jiang Province; Ha Jiang Town, Ha Jiang Province; Gao Bao Village, Ha Jiang Province), China, India, Australia, Malaysia, Indonesia.

***Hasarius adansoni* (Audouin, 1826)**

Material examined. – 1 male (IZCAS), Long Son Province, Vietnam, 21 Dec.2000; 1 male (IZCAS), Quang Hoa, Cao Bang Province, Vietnam, 18 Dec.2000.

Distribution. – Vietnam (Quang Hoa, Cao Bang Province), Japan, China, Pantropical.

***Menemerus bivittatus* (Dufour, 1831)**

Material examined. – 1 female (IZCAS), Quang Hoa, Cao Bang Province, Vietnam, 18 Dec.2000; 1 female (IZCAS), Quang Hoa, Cao Bang Province, Vietnam, 18 Dec.2000; 1 male (IZCAS), Viet Lann Village, Ha Jiang Province, Vietnam, 10 Dec.2000.

Distribution. – Vietnam (Quang Hoa, Cao Bang Province; Quang Hoa, Cao Bang Province; Viet Lann Village, Ha Jiang Province), China, Pantropical.

***Pancorius minutus* Zabka, 1985**

Material examined. – 2 females (IZCAS), Viet Lann Village, Ha Jiang Province, Vietnam, 10 Dec.2000.

Distribution. – China (Viet Lann Village, Ha Jiang Province), Nepal, Vietnam, Indonesia.

***Phintella bifurcilinea* (Bösenberg & Strand, 1906)**

Material examined. – 1 male (IZCAS), Sac Ha Village, Cao Bang Province, Vietnam, 17 Dec.2000; 2 males (IZCAS), Viet Lann Village, Ha Jiang Province, Vietnam, 17 Dec.2000.

Distribution. – Vietnam (Sac Ha Village, Cao Bang Province; Viet Lann Village, Ha Jiang Province), Japan, China, Korea.

***Phintella debilis* (Thorell, 1891)**

Material examined. – 1 female (IZCAS), Viet Lann Village, Ha Jiang Province, Vietnam, 10 Dec.2000; 1 male, 1 female (IZCAS), Viet Lann Village, Ha Jiang Province, Vietnam, 10 Dec.2000.

Distribution. – Vietnam (Viet Lann Village, Ha Jiang Province), India to Java.

***Phintella versicolor* (C. L. Koch, 1846)**

Material examined. – 1 female (IZCAS), Quang Hoa, Cao Bang Province, Vietnam, 18 Dec.2000; 1 female (ZRC), Van Hoa Village, Sac Tay Province, Vietnam, 24 Dec.2000; 1 female (ZRC), Viet Lann Village, Ha Jiang Province, Vietnam, 10 Dec.2000; 1 female (IZCAS), Sac Ha Village, Cao Bang Province, Vietnam, 17 Dec.2000; 2 males (IZCAS), Tan Linh Village, Bavi District, Son Tay Province, Vietnam, 23 Dec.2000.

Distribution. – Vietnam (Quang Hoa, Cao Bang Province; Van Hoa Village, Sac Tay Province; Viet Lann Village, Ha Giang Province; Sac Ha Village, Cao Bang Province; Tan Linh Village, Bavi District, Son Tay Province), China, Korea, Japan, Sumatra, Hawaii.

***Phintella vittata* (C. L. Koch, 1846)**

Material examined. – 1 female (IZCAS), Tab Linch Village, Son Tay Province, Vietnam, 24 Nov.2000; 1 female (ZRC), Viet Lann Village, Ha Giang Province, Vietnam, 10 Dec.2000; 1 female (ZRC), Viet Lann Village, Ha Giang Province, Vietnam, 10 Dec.2000.

Distribution. – Vietnam (Tab Linch Village, Son Tay Province; Viet Lann Village, Ha Giang Province), India to Philippines.

***Portia quei* Zabka, 1985**

Material examined. – 1 female (IZCAS), Tab Linch Village, Son Tay Province, Vietnam, 24 Nov.2000.

Distribution. – Vietnam (Tab Linch Village, Son Tay Province), China.

***Rhene albigera* (C. L. Koch, 1846)**

Material examined. – 1 male (IZCAS), Tan Linh Village, Bavi District, Son Tay Province, Vietnam, 23 Dec.2000.

Distribution. – Vietnam (Tan Linh Village, Bavi District, Son Tay Province), China, India, Sumatra, Malay Peninsula.

***Rhene rubrigera* (Thorell, 1887)**

Material examined. – 1 male, 1 female (IZCAS), Tan Linh Village, Bavi District, Son Tay Province, Vietnam, 12 Dec.2000.

Distribution. – Vietnam (Tan Linh Village, Bavi District, Son Tay Province), India, Sumatra, Hawaii.

***Synagelides palpalis* Zabka, 1985**

Material examined. – 1 male (IZCAS), Viet Lann Village, Ha Giang Province, Vietnam, 10 Dec.2000.

Distribution. – Vietnam (Viet Lann Village, Ha Giang Province), China.

***Telamonia festiva* (Thorell, 1887)**

Material examined. – 1 female (IZCAS), Gao Bao Village, Ha Giang Province, Vietnam, 9 Dec.2000.

Distribution. – Vietnam (Gao Bao Village, Ha Giang Province), South east Asia.

***Thiania bhamoensis* Thorell, 1887**

Material examined. – 1 female (IZCAS), Viet Lann Village, Ha Giang Province, Vietnam, 10 Dec.2000.

Distribution. – Vietnam (Viet Lann Village, Ha Giang Province), Myanmar to Sumatra.

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