

A new *Phytocoris* Fallén, 1814 (Heteroptera: Miridae) from ChileНовый вид рода *Phytocoris* Fallén, 1814 (Heteroptera: Miridae)
из ЧилиFrédéric Chérot¹ & Diego Leonardo Carpintero²
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Introduction

Phytocoris Fallén, 1814 is probably the largest genus of Miridae (Insecta: Heteroptera), with upward of 700 species in the World [Schuh, 1995]. Despite recent efforts to document the New World species of the genus [Carpintero & Chérot, 2005; Carvalho, 1983, 1986, 1990a, b; Carvalho & Carpintero, 1986, 1989, 1992; Carvalho & Costa, 1990a, b, c, 1991a, b, 1992, 1993, 1995; Carvalho & Ferreira, 1969, 1986; Carvalho & Gomes, 1969, 1970; Hernandez & Stonedahl, 1997; Maldonado-Capriles, 1969, 1991; Stonedahl, 1988], many taxa, particularly from southern parts of South and North America, remain undescribed.

In the present work, we provide the description of both sexes of *Phytocoris izyaslavi* sp. n. from Chile.

The terminology of the genital structures follows, with slight modifications: Chérot [2002], Davis [1955], Kelton [1959], Slater [1950], and Stonedahl [1988].

The examined specimens are preserved in the following collections: D. Carpintero's collection, Buenos Aires, Argentina (CAR); Institut Royal des Sciences naturelles de Belgique, Brussels, Belgium, U.E. (ISNB); Museo de Historia Natural de Chile Santiago, Chile, (MHNC).

Systematic part

Phytocoris izyaslavi Chérot & Carpintero sp. n.
Figs 1–7

MATERIAL. **Holotype.** Chile. PETORCA: ♂, Cuesta Las Palmas, 19.IX.1992, Barriga coll., on *Adesmia microphylla* (MHNC). **Paratypes.** 3 ♂♂, 4 ♀♀, 1 nymph, as holotype (CAR and ISNB, including FC n°1594); Chile. ACONCAGUA: 2 ♂♂, Cuesta el Melyn, X.1988, Barriga (CAR and ISNB, including FC n°1593); CHACABUCO: ♀, Cuesta La Dormida, IX.1988, Barriga (CAR); CHOAPA: 2 ♂♂, 2 ♀♀, Cuesta Cavilolén, X.1994, Barriga (CAR); LIMARI: 10 ♂♂, 8 ♀♀, 4 nymphs, Cuesta El Espino, 1600 m, IX.1992, Barriga (CAR); PETORCA: 13 ♂♂, 6 ♀♀, Tunel Las Palmas, 19.IX.1992, leg. J. E. Barriga (CAR).

DESCRIPTION. **Male** (holotype). **Measurements** (mm). Total length: 6.58; total width: 1.95. Head: length: 0.43; width across eyes: 0.99; width of vertex: 0.28. Length of antennal segments: I: 0.97; II: 2.47; III: 0.95; IV: 0.82. Pronotum: length: 0.79; basal width: 1.50. Cuneus: length: 1.17; basal width: 0.60. **Coloration.** Dark brown. Scutellum, basal part of pronotum, and medial margin of cuneus black. Apex of scutellum, basal part and punctation of cuneus, and basal 2/3 of second antennal segment yellow to clear brown. First antennal segment brownish yellow with dark brown and clear marks. Femora black, with yellow marks. **Head.** Smooth, wide and short. Clypeus not covered by frons in dorsal view. Maxillary plate slightly carinate medially. Frons slightly striate, nonpunctate, distinctly separated from clypeus. Eyes pilose, contiguous with anterior margin of pronotal collar, relatively large, occupying most of head length in dorsal view (approximately 2/3) and head height in lateral view (approximately 3/4). Frons and vertex with short, silky, decumbent, silvery setae and some stiff, erect, black setae. Vertex lacking longitudinal sulcus (but with a longitudinal black stripe), without carina on posterior margin. Antennal segments with short, suberect, grey setae and, first segment with stiff,

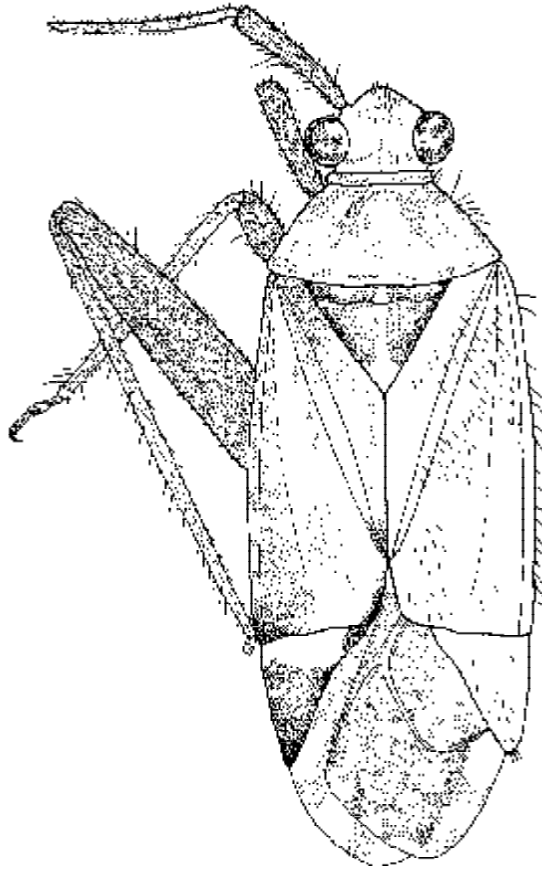


Fig. 1. *Phytocoris izyaslavi* sp.n. Habitus of male, dorsal view.

Рис. 1. *Phytocoris izyaslavi* sp.n. Внешний вид самца, сверху.

suberect or erect, black, setae. Rostrum reaching fourth abdominal segment. **Thorax.** Smooth, slightly shiny. Pronotal collar with some stiff, erect, black setae. Pair of large, stiff, erect, black setae on anterior corners and some thin, suberect, black setae on lateral margins of pronotal disk. Pronotal surface with short, silky, decumbent, silvery setae and some stiff, erect, black setae. Pronotal callosities small, black. Scutellum swollen, almost glabrous, with some silky, decumbent, silvery setae on lateral margins only. Mesoscutum exposed, brown, with black lateral fossae. Hemelytra slightly shagreened, with short, silky, decumbent, silvery setae and some stiff, erect or suberect, black setae, mainly on corium. Membrane dark brown, with two translucent yellow patches, contiguous with lateromedial margin and apex of cuneus respectively, vein yellow apically, brown basally, main cell with small yellowish spots. Legs with short, suberect black setae. Metatibial spines brown to black, metatibial spinulae black. **Abdomen.** Dark brown, with whitish setae. **Genitalia** (paratype FC n°1593). **Right paramere** (Fig. 2). Stout. Sensory lobe (Ls) small, glabrous. Primary apophysis or shaft (Pa1) elongated. **Left paramere** (Fig. 3). Elongated. Sensory lobe (Ls) narrow, glabrous. Body wide, unseparated from arm, with small teeth on outer margin. Primary apophysis or shaft (Pa1) elongated, apically bill-like, with a pair of additional lobes (arrows). **Endophallus** (Fig. 4). Lacking ACH or true spiculum *sensu* Chérot [2002], but including a small field of denticles (arrow) and a large subapical comb

(Co) with 8 teeth, the posterior tooth very elongate, spicule-like. *Ductus seminis* (Ds) wide. Secondary gonopore (G2) typical of *Mirini*, lacking apical process or pilose plate.

Females (paratype FC n°1592). **Measurements** (mm). Total length: 4.97; total width: 1.78. Head: length: 0.48; width across eyes: 0.95; width of vertex: 0.37. Length of antennal segments: 0.87; II: 2.00; III: 0.91; IV: 0.82. Pronotum: length: 0.75; basal width: 1.46. Cuneus: length: 0.87; basal width: 0.60. **External anatomy.** Similar to male, shorter, macropterous. **Genitalia** (paratype FC n°1594). **Parieto-vaginal rings** (Fig. 5, arrow). Small, typical of *Mirini*, distinctly separated. Anterior margin almost straight. Posterior and outer margins convex. Inner margins short, pointed. Medial plate absent. Posterior margin of dorso-labiate plate thick. Sclerites between the first fibulae reduced (Fig. 6). **Posterior wall** (Fig. 7). Very complex. 'A' structures or inter-ramal sclerites (SA) ventrally contiguous, with ventral and dorsal margins s-shaped laterally, concave medially. B structure with:

- (1) dorsal structure divided, dorsal part ["hat" *sensu* Chérot, 2002, cha] with two lateral branches and ventral part ["plate" *sensu* Chérot, 2002, plt] oval;
- (2) elongated foot (Pi) and
- (3) very wide posterior plate ["base" *sensu* Chérot, 2002, So].

H structures or lateral lobes (SH) large, completely separated from B structure.

DISTRIBUTION. Chile (Aconcagua, Chacabuco, Choapa, Limari, Petorca; biogeographical regions of Santiago and Coquimbo, sub-region Central Chile).

BIOLOGY. Collected on *Adesmia microphylla* (Fabaceae).

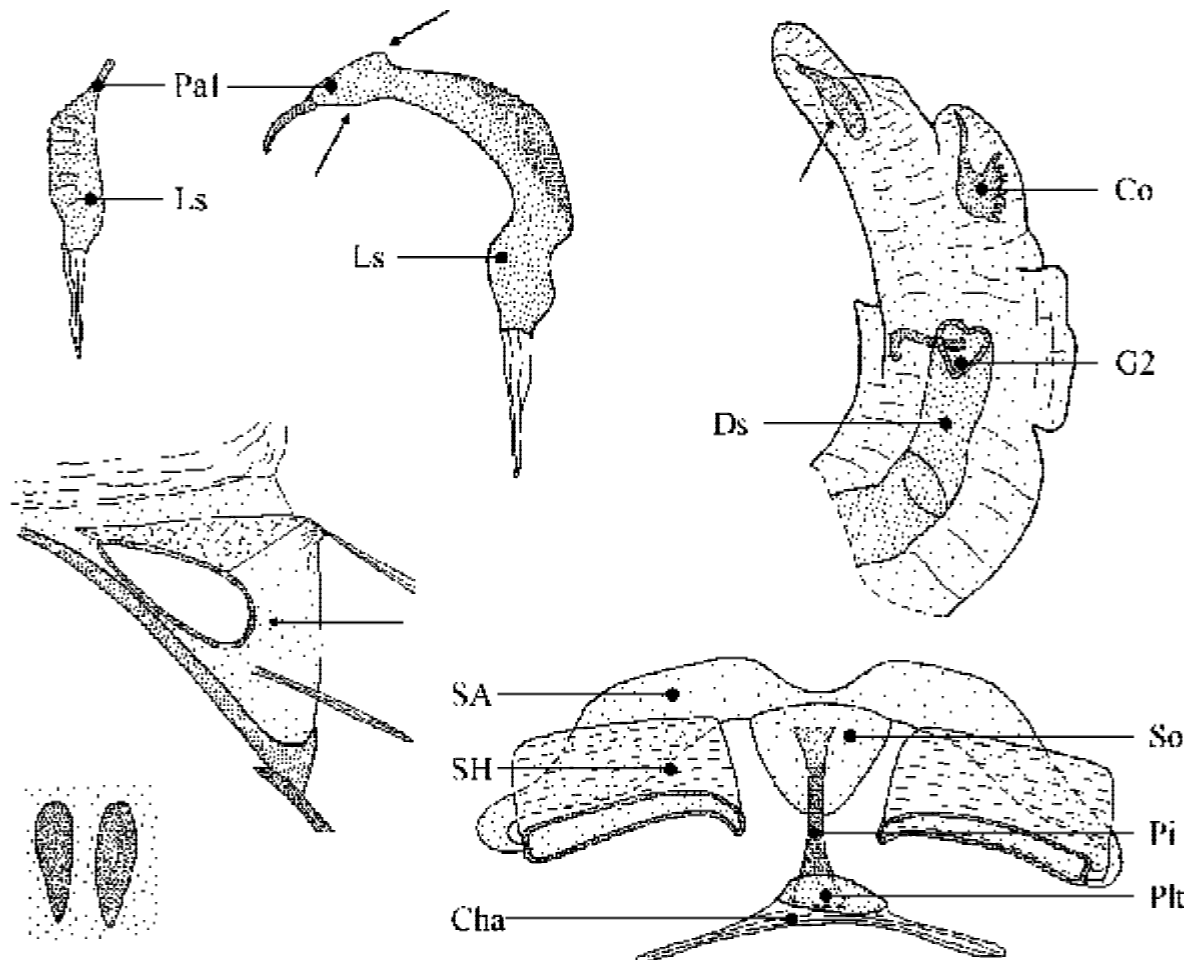
ETYMOLOGY. The species is dedicated to Dr Izyaslav M. Kerzhner (St. Petersburg, Russia).

DISCUSSION. The new species can be distinguished from other *Phytocoris* species by its habitus and by the male genitalic structures, particularly the endophallic sclerites.

Even though *Phytocoris izyaslavi* sp.n. shares several character states with *Phytocorisca* spp., such as the swollen scutellum and dorsal pilosity, including stiff, erected black setae and silky, decumbent, silvery setae, the new species cannot be included in the genus recently reviewed by Carpintero & Chérot [2005]. The relatively narrow eyes, the first antennal segment not constricted medially, the vertex lacking lateral humps surrounding a medial concavity, and the posterior pronotal margin lacking of stiff black setae tufts, compel us to assign the new species in *Phytocoris* Fallén, 1814.

As pointed out by several authors [e.g. Carpintero & Chérot, 2002, 2005; Chérot, 1997; Stonedahl, 1988], the classification of *Phytocoris*-like mirines [loosely known as "*Phytocoris* complex" *sensu* Chérot, 1997] is unsatisfactory and in great need of investigation on a worldwide scale. In the present state of our knowledge, therefore, the relationships of *Phytocoris izyaslavi* sp.n. to other species in the complex is practically impossible to assert more accurately.

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Figs 2–8. *Phytocoris izyaslavi* sp.n.: 2 — right paramere, dorsal view; 3 — left paramere, dorsal view; 4 — endophallus; 5 — right parieto-vaginal ring, dorsal view; 6 — small sclerites between the first fibulae; 7 — posterior wall in dorsal view. Cha — “hat”; Co — comb; Ds — *ductus seminis*; G2 — secondary gonopore; Ls — sensory lobe; Pa1 — primary apophysis; Pi — foot; Plt — plate; SA — A structure (inter-ramal sclerites); SH — H structures (lateral lobes); So — “base”.

Рис. 2–8. *Phytocoris izyaslavi* sp.n.: 2 — правый парамер, сверху; 3 — левый парамер, сверху; 4 — эндофаллус; 5 — правое парieto-вагинальное кольцо, сверху; 6 — маленькие склериты между первыми фибулами; 7 — задняя стенка копулятивной сумки, сверху. Cha — “шляпка”; Co — гребень; Ds — *ductus seminis*; G2 — вторичный гонопор; Ls — чувствительный бугорок; Pa1 — первичный апофиз; Pi — ножка; Plt — пластинка; SA — A структура; SH — H структура; So — “основание”.

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