

Fig. 20. *Tshekardomina imbecilla* sp. nov.: (a) paratype PIN, no. 1700/3908, female, general appearance; (b) holotype PIN, no. 4987/22, female, general appearance; (c) paratype PIN, no. 4987/23, female abdomen fragment. Scale bar 3 mm in Fig. 20a, 5 mm in Fig. 20b, and 1 mm in Fig. 20c.

Type species. Tsh. capitata sp. nov.

D i a g n o s i s. Medium-sized insects. Head very large, eyes not large. Pronotum noticeably smaller than head. Mesonotum as long as it is wide, metanotum of similar structure. Legs slender; forelegs short, hind legs elongated. Anterior margin of forewing slightly convex, subcostal field wider than costal one. SC running over wing midlength, MA two-branched, one of which may connect to MP, latter pectinate and having five outruns.

Species composition. Type species.

C o m p a r i s o n. This new genus is closest to the genus *Sylvaphlebia*, from which it differs in a larger head, smaller pronotum, slender legs, two-branched MA, and five-branched MP.

Tshekardophlebia capitata Aristov, sp. nov.

Et y molog y. From Latin *capitata* (large headed).

H o l o t y p e. PIN, no. 1700/2101, positive impression of satisfactorily preserved complete insect; Tshekarda locality; Kungurian, Koshelevka Formation.

Description (Fig. 16). The pronotum is trapezoid and slightly narrowing backward. The paranotal ring is also trapezoid, moderately broad, and widens backward. The anterior tibiae are as wide as the femora. R is curved basally, RS is two-branched and starting in the basal third of the wing. CuA_1 ramifies before the midlength, its distal branch is reaching the distal third of the wing.

M e a s u r e m e n t s, mm: Forewing length, about 13; hindwing length, about 11.

Material. Holotype.

Family Euremiscidae G. Zalessky, 1951 Genus Euremisca G. Zalessky, 1951 Euremisca elegans Aristov, sp. nov. Plate 3, fig. 4

Et y molog y. From Latin *elegans* (elegant).

Holotype. PIN, no. 1700/873, part and counterpart of moderately preserved complete insect; Tshekarda locality; Kungurian, Koshelevka Formation.

Description (Fig. 17). Medium-sized insects. The head is medium-sized, slightly longer than it is wide; the eyes are not large; the antennae are thin and long, the first antennomere is enlarged. The prothorax is longer than it is wide, the cervicalia are triangular, the pronotum is as long as it is wide, the paranotalia are moderately wide. The forelegs are elongated. The mesonotum is as long as it is wide, the scutum is ovalshaped and narrowing backward, the prescutum is convex, the scutellar lobes are large and almost contiguous. The basalars are large. The metanotum is of similar structure but somewhat larger. The anterior margin of the forewing is slightly convex, the costal field is as wide as the subcostal one, SC is reaching the distal third of the wing, RS is starting beyond the basal third of the wing, MA is simple prior to the wing midlength, MP is two-branched. CuA forms a symmetrical fork, distal branches of CuA1 are not preserved, CuP is bent toward the anterior margin of the wing.

M e a s u r e m e n t s, mm: Body length, about 21; forewing length, 20.5; hindwing length, 18.

C o m p a r i s o n. The new species differs from the type species *E. splendens* G. Zalessky, 1951 (Novokshonov and Aristov, in press) in both pronotum and SC being longer and in a later origin of RS.

Material. Holotype.

Family Tillyardembiidae G. Zalessky, 1938

Genus Kungurembia Aristov, gen. nov.

E t y m o l o g y. From the Kungurian Stage and the generic name *Tillyardembia*.

Type species. K. brevicervix sp. nov.

Diagnosis. Small and medium-sized insects. Head prognathous, medium-sized and large, narrowing anteriorly. Eyes large, antennae long and filiform, several first antennomeres as long as they are wide, others slightly elongated. Pronotum little wider than long and slightly narrowing anteriorly. Fore coxae short, femora equally wide in both males and females, with longitudinal grooves, narrowing apically, tibiae slender. Mesonotum longer than it is wide, scutum rhomboid, prescutum small, scutellar lobes not contiguous, scutellum acuminate, basalars large. Middle legs shortest, tibiae longer than tarsi. Metanotum similar to mesonotum, scutum transverse and short, hind legs longest. Anterior margin of forewing slightly convex, apex acuminate. Costal field two or three times as wide as subcostal one, SC reaching distal third of wing, R curved before RS base, RS starting in basal third of wing, pectinate and having four to five outruns, M and CuA branch late. Anterior margin of hindwing slightly convex, costal field two or three times as wide as subcostal one, SC not reaching wing midlength. Abdomen elongate, almost reaching apices of folded wings, ovipositor long and stout, cerci long and noticeably narrowing apically, their segments elongated.

Species composition. Type species and *K. pallida* sp. nov.

Comparison. It differs from the type genus (Vilesov and Novokshonov, 1993) in the transverse pronotum, longer SC, and later origin of RS.

Kungurembia brevicervix Aristov, sp. nov.

Plate 3, fig. 6

Etymology. From Latin *brevicervix* (having short neck).

Holotype. PIN, no. 1700/796, part and counterpart of well-preserved complete insect; Tshekarda locality; Kungurian, Koshelevka Formation.

Description (Fig. 18). The head is mediumsized. Antennomeres are slightly narrowing basally. The anterior edge of the pronotum is straight, the posterior edge is slightly convex. The anterior femora are slightly broadened and are equally wide in both males and females. The lower margins of the femora are slightly sinuous, the mesoscutellar lobes have large tergal incisions. The forewing apex is slightly acuminate. The anterior margins of both the fore- and hindwings are slightly convex.

Measurements, mm: Body length, 9-15; forewing length, 9–14; hindwing length, 8–12.

M a t e r i a l. In addition to the holotype, paratypes PIN, nos. 1700/544, 603, 688, 732, 743, 795, 826, 911, 954, 1031, 1164, 1952, 3429, 3430, 3501, 3684, 3795, 3870, 3948, 4957 (females), 4987/15, 16 (males), 1700/592, 691, 699, 816, 881, 905, 915, 924, 968, 976, 980, 1055, 1081, 1102, 1106, 1154, 1178, 2339, 3425, 3430, 3431, 3465, 3690, 3764, 3836, 3926, 3990, 3993, 4987/17, 18 (sex undetermined) from the same locality.



Fig. 21. *Tshekardomina imbecillissima* sp. nov.: (a) holotype PIN, no. 1700/608, male, general appearance; (b) holotype PIN, no. 1700/3522, general appearance; (c) *Tshekardomina subincurvata* sp. nov., holotype PIN, no. 1700/3995, forewing. Scale bar 1 mm in Figs. 21a and 21b, and 3 mm in Fig. 21c.

Kungurembia pallida Aristov, sp. nov.

Plate 3, fig. 5

Et y molog y. From Latin *pallida* (pale).

Holotype. PIN, no. 4987/19, part and counterpart of moderately preserved complete insect; Tshekarda locality; Kungurian, Koshelevka Formation. Description (Fig. 19). Small insects. The head is large, the antennae are thin. The fore femora are not broadened and somewhat wider in females than in males, the middle and hind femora are rather slender and long, the middle femora are comparatively equal to the fore femora, the hind femora are longer. The mesoscutellar lobes are round and medium-sized. The anterior margin of the forewing is almost straight, its apex

PALEONTOLOGICAL JOURNAL Vol. 38 Suppl. 2 2004



Fig. 22. Representatives of the genus *Sheimia* O. Martynova, 1958: (a) *Sheimia sojanensis* O. Martynova, 1958, holotype PIN, no. 117/1145, female, general appearance; (b, c) *Sheimia tshekardensis* sp. nov.: (b) holotype PIN, no. 4987/25, male, general appearance; (c) paratype PIN, no. 4987/26, female, general appearance. Scale bar 1 mm.

is rounded, the anterior margin of the hindwing is nearly straight. The venation is unknown.

M e a s u r e m e n t s, mm: Body length, 6–8; forewing length, 7–4.5; hindwing length, 4–6.

C o m p a r i s o n. It differs from the type species in being smaller, in the relatively large head, slender and long femora, and anterior margins of both the fore- and hindwings being almost straight. M a t e r i a l. In addition to the holotype, paratypes PIN, nos. 4987/20, 21 and PIN, no. 1700/641 from the same locality.

Family Tshekardominidae Novokshonov et Aristov, 2002 Genus *Tshekardomina* Novokshonov et Aristov, 2002

Tshekardomina imbecilla Aristov, sp. nov.

Plate 4, fig. 1 E t y m o l o g y. From Latin *imbecilla* (weak).

PALEONTOLOGICAL JOURNAL Vol. 38 Suppl. 2 2004