

**Ergebnisse der zoologischen Forschungen  
von Dr. Z. Kaszab in der Mongolei.  
231. A Contribution to the Knowledge  
of the Genus *Medetera* (Dolichopodidae, Diptera)  
of Mongolia**

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The material for this paper was kindly placed at the authors disposal by Dr. Z. KASZAB. Specimens kept in the collection of the Zoological Institute of the Academy of Sciences of the USSR (Leningrad) were also included. The author uses this opportunity to express his sincere gratitude to Dr. Z. KASZAB.

***Medetera micacea* Lw.**

Central aimak: Onžulin Chundi, 1400 m, 100 km SW v. Ulan-Baator, 15.4. 1964, 3 ♀ (Nr 131); 25 km O von Somon Lun, 1180 m, 4.7. 1964, 1 ♀ (Nr 262); 12 km SO v. Ulan-Baator, Nucht in Bogdo ul, 1500 m, 6. 7. 1964, 4 ♂, 3 ♀ (Nr 271, 272); Zuun-Chara, Duusch-ul, 1160 m, 8. 7. 1964 (Nr. 284); Kerulen, 45 km O v. Somon Bajandelger, 1400 m, 26. 7. 1965 (Nr 304); Uburchangaj aimak: Changaj Gebirge, 2 km S von Somon Schanch, 1690 m, 30. 6. 1964, 1 ♀ (Nr 230); Chentej aimak: Čandagan tal 40 km O v. Somon Žargaltchaan, 1300 m, 28. 7. 1965, 1 ♀ (Nr 316); 7 km NO von Somon Mörön, 1200 m, 28. 7–21. 8. 1965 (Nr 323); Archangaj aimak, Changaj Gebirge, 8 km W von Somon Urdtamir, 1620 m, 19. 6. 1966 (Nr 538).

***Medetera kaszabi* sp. n. (Fig. 1.)**

M ale. Frons metallic green, faintly brilliant, dusted whitish grey. Face narrow, metallic shining, green. Epistoma dusted grey; its length 1.5 times longer than the height of the clypeus. Clypeus metallic green, hardly noticeably dusted on the sides. Antennae black. Third joint of the antennae cross-oval, its length less than its height. Arista apical, brown, its length equal to the distance from ocellar bristles to the lower edge of the face. Palpi metallic shining, blackish brown. Postocular bristles yellow. Thorax metallic brilliant, green, dusted grey. Mesonotum with black bristles. Propleurae with 2 yellow robust bristles. Dorsocentral bristles hardly differing in length, 3 pairs of dorsocentral bristles. Acrostichal bristles developed. 1 notopleural and 1 supraalar bristles. Scutellum with 2 bristles at hind edge, below yellow. Wings hyaline with yellow veins. Proportions between length of the section of costal vein between  $r_{2+3}$  and  $r_{4+5}$  and the length of the section

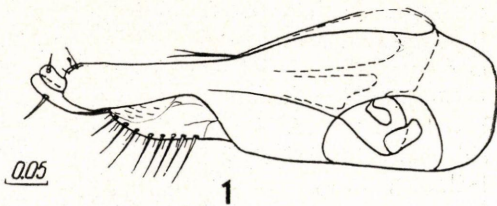


Fig. 1. *Medetera kaszabi* sp. n. Hypopygium, lateral

of same vein between  $r_{4+5}$  and  $m_{1+2}$  as 1.7/0.7.  $r_{4+5}$  and  $m_{1+2}$  converging to the top, at the top of the wing parallel. Apical section  $m_{1+2}$  straight. Proportion of its length and the length of the basal part 5.0/5.9. Basal part of  $m_{3+4}$  without dilation. Proportions of apical section  $m_{3+4}$  and outer crossvein as 1.4/0.8. Halteres yellow. Squamulae and cilia yellow. Legs brown, tops of tarsi darker. Fore coxae with dark hairs. Middle tibiae with 1 antero- and 1 posterodorsal bristle at the base. Hind femora with a group of anterodorsal bristles at the base. Hind tibiae with a group of pale posterodorsal bristles at the top of tibiae, with a row of robust black bristles at the top on posteroventral side. First hind tarsal joint with a small tooth on the posteroventral side. Proportions of hind tarsal joints I/II as 1.3/2.4. Abdomen metallic green, brilliant, dusted grey, with yellow hairs. Hypopygium long. Epandrium long, narrowing to the top. Gonopods wide. Surstylus consisting of 2 bristles. Cerci long on dorsal side, with robust bristles and hairs.

Length 1.7 mm, wing length 1.5 mm.

Holotypes: ♂, Mongolia, Central aimak: Zuun Chara, Duusch ul, 1100 m, 8. 7. 1964 (Nr 284).

Paratypes: 2 ♀, Chentej aimak; 150 km ONO v. Öndörchaan, 10 km S von Kerulen, 1000 m, 30. 7. 1965 (Nr 331); 2 ♀, Dzavachan aimak, Tes-somona, 3-4. 7. 1968 (M. Kozlov); 1 ♂, Chövsgöl aimak, Tes Fluss bei Schwzjin-Gol, 1. 7. 1968 (M. Kozlov). Holotype and one paratype deposited in the collection of the Hungarian Natural History Museum (Budapest). The other paratypes deposited in the collection of the Zoological Institute, Academy of Sciences of USSR (Leningrad).

#### *Medetera latipennis* sp. n.

Male. Frons dark green, with a bronze reflection, densely dusted greyish brown. Face narrowed in basal 1/3 of epistoma. Epistoma dark green, with a bronzy reflection, densely dusted greyish brown, with a metallic shining patch in basal 1/3. Clypeus metallic, brilliant, dark green, dusted greyish on the sides. Antennae black. Third joint of antennae cross-oval. Arista apical, brown, its length equal to the distance from vertical bristles to the lower edge of palpi. Postocular bristles yellow. Thorax metallic shining, dark green, dusted greyish brown. Propleurae with 2 robust dusky yellow bristles, approximately equal in length. Mesonotum with 3 dark longitudinal stripes and black bristles. 3 pairs of comparatively robust dorsocentral bristles, first pair emerging before suture. Acrostichal bristles comparatively well developed. From scutellum to the line connecting sutural bristles 2-3 pairs of acrostichal bristles. 2 notopleural and 1 supraalar bristles. Scutellum with robust bristles and 2 bristles smaller in length. Length of scutellum considerably exceeding half of its width. Proportions of the length of scutellum and its width as 1.1/1.5. Wings hyaline.  $r_{4+5}$  and  $m_{1+2}$  converging to the top. Apical section of  $m_{1+2}$  scarcely curved. Apical section  $m_{3+4}$  scarcely longer than outer crossvein. Halteres yellow. Squamulae and cilia yellow. Femora greenish brown, top of femora, knees, tibiae and the base of tarsi yellow. Fore coxae with yellowish brown hairs. Middle tibiae with 1 antero- and 1 posterodorsal bristles. Hind femora with a group of long anterodorsal bristles at base. Hind tibiae with 1 dorsal bristle and 1 posterodorsal bristle at base of the tibiae, and with a row of robust bristles on posterodorsal side. First hind tarsal joint with a small tooth on the inner side, its length about 2 times less than that of the second one. Abdomen metallic brilliant, dark, green, with greyish brown pubescence and dusky yellow hairs. Hypopygium short. The height of the epandrium considerably exceeding 1/2 of

its length. Gonopods narrow, almost straight, only dorsal lobe bent to ventral side at the top. Surstylus whiplike, bristles of surstylus from a common base. Cerci with clawlike bristles at the top and an appendix on ventral side at the apex of cerci. Hypandrium narrow, dilated only at the base and wedge-like, narrowing to the top. Phallus plain. Ejaculator strongly incrassate. Dorsal apodema of the phallosome with a large appendix on dorso-proximal side. Phallobase with a tooth-like appendix.

Female unknown.

Length 1.8–2.0 mm, wing length 2.1–2.2 mm.

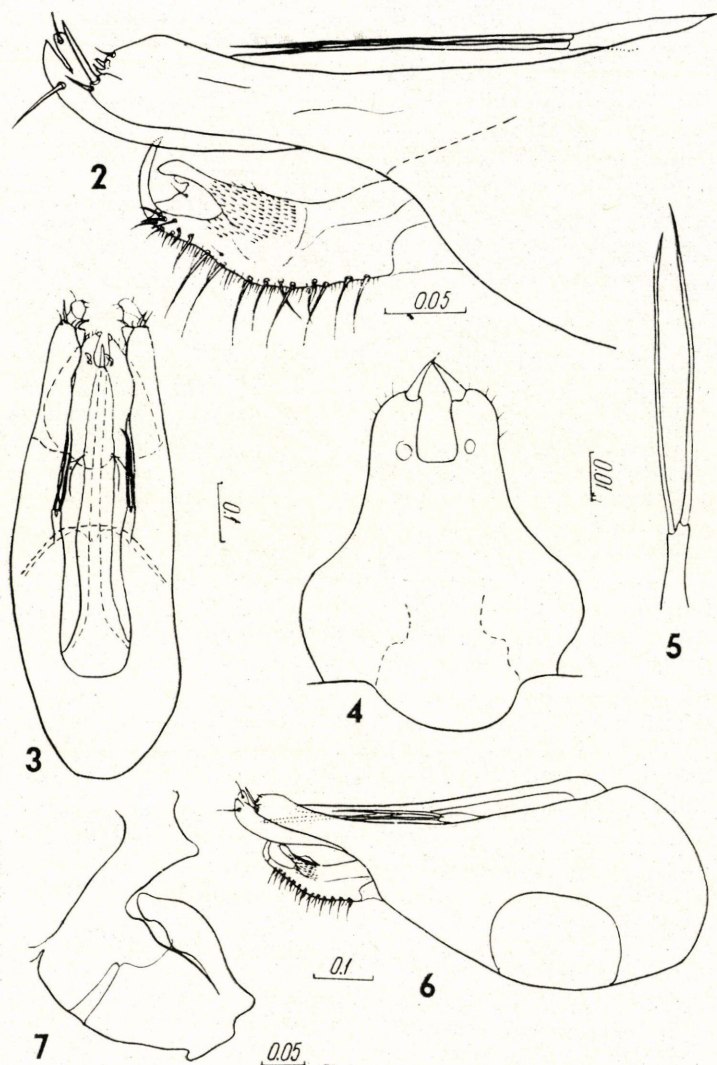
Holotype: ♂. Mongolia, Alashan, Dun-yuan-ik, 22–27, 6. 1908, leg. KOSLOV (prep. N 24,008).

Paratype: 1 ♂. Mongolia, Central aimak; 12 km SO v. Ulan-Baator, Nucht i Bogdo ul, 1500 m, 6. 7. 1964 (Nr 271).

Holotype deposited in the Zoological Institute of the Academy of Sciences of the USSR (Leningrad). Paratype deposited in Hungarian Natural History Museum (Budapest).

### *Medetera spinulicauda* sp. n. (Fig. 2–7.)

Male. Frons dark, metallic, green, dusted grey. Face metallic green, brilliant, broad, dilated to the base. Epistoma dusted grey on the edges; its height 1.5 times as long as that of clypeus. Antennae black. Third joint of the antennae oval, its length exceeding its height. Arista preapical, dark, brown at the apex; its length equal to the distance from the base of ocellar bristles to the lower edge of epistoma. Postocular bristles whitish yellow. Thorax dark, metallic, green, dusted grey, mesonotum with dark longitudinal stripes. Propleurae with 2 brown bristles approximately equal in length. Dorsocentral bristles becoming noticeably longer from frontal edge of mesonotum to scutellum. 3 robust dorsocentral bristles, first one before suture. Acrostichal bristles fine. 1 supraalar bristle. 1–2 notopleural bristles. Scutellum with 2 robust and 2 small marginal bristles. Coxae and femora (excluding the tops) dark brown, knees yellow, tibiae and base of tarsi yellowish brown, top of tarsi darkened. Coxae with yellow hairs. Femora without bristles from below. Middle tibiae with 1 antero- and 1 posterodorsal bristles at the base; anterodorsal bristle a little better developed and nearer to the apex than posterodorsal one. Distance between the base of bristles about equal to or exceeding the length of anterodorsal bristle. Hind femora with a group of long anterodorsal bristles at the base. Hind tibiae with 1 robust dorsal bristle at the base; at the top with several long dorsal bristles, and on the top with a hollow on posterodorsal side, surrounded at the base by a row of long golden bristles, and at the top by a row of robust black bristles. First hind tarsal joint with a small tooth on the inner side. Proportions of the hind tarsal joints I/II as 1.4/2.5. Wings hyaline.  $r_{4+5}$  and  $m_{1+2}$  converging. Apical section of  $m_{1+2}$  scarcely curved. Proportions of the length of outer crossvein and the length of the apical section  $m_{3+4}$  as 1.2/1.8. Halteres and squamulae yellow, cilia whitish yellow, dusted grey, in dusky yellow hairs. Hypopygium big. Height of epandrium about 1.5 times less than its length. Gonopods short. Dorsal and ventral lobes of gonopods closely connected and without a split slid. Ventral lobe of gonopods wide at the apex dilated. Surstylus consisting of 2 bristles with a common base and of about equal height. Bristles of surstylus whiplike, without appendix. Cerci short, at the top with a clawlike robust bristle, on dorsal side with numerous robust bristles and hairs, on ventral side with a long



Figs 2—7. *Medetera spinulicauda* sp. n.; end of hypopygium, lateral (2); hypopygium, ventral (3); cerci, ventral (4); surstyli, ventral (5); hypopygium, lateral (6); base of phallosome, lateral (7)

appendix in fine bristles. Hypandrium narrow. Phallosome consisting of a large ejaculator, dorsal apodema well developed, 2 small lateral apodemata, phallus thin.

Female. Face a little wider. First hind tarsal joint without a small tooth on the inner side.

Length 1.6–2.4, wing length 1.8–2.7 mm.

Holotype: ♂. Amur region, 40 km W Svobodnij, Klimouzi, 22. 5. 1959. leg. ZINOVJE V (deposited in Leningrad).

Paratypes: 16 ♂, 34 ♀, all the same as holotype, 4. 6. 1958 (prep. Nr 24,115, 24,116, 24,186, 24,129); Mongolia Central aimak: 12 km SO v. Ulan-Baator, Nucht

i. Bogdo ul. 1500 m, 6. 7. 1964, 1 ♂ 4 ♀ (Nr 271, 272); Zaisan, Bord ul., 15. 6. 1967, 2 ♂, 1 ♀ (M. Kozlov); Bajanchongor aimak: Changaj Gebirge, Ulaan çolon, 18 km S vom Pass Egijn davaa, 2300 m, 21. 6. 1966, 3 ♀ (Nr 552); Südgobi aimak: Gurban Sajchan ul, 30 km S v. Somon Bulgan, 1700 m, 19. 6. 1964, 1 ♂ (Nr 154); Archangaj aimak, Changaj Gebirge, 8 km W von Somon Urdtamir, 1620 m, 19. 6. 1966, 2 ♀ (Nr 538, 540).

***Medetera brunea* sp. n.**

Male. Frons metallic, brilliant, green, tinged bronzy, dusted greyish-brown. Face metallic, brilliant, in the lower part of epistoma and in the middle of clypeus green, dusted greyish on the sides, under the antennae and near the suture. Its width under the antennae exceeding 1.5 times the height of the third joint of the antennae. Epistoma hardly longer than clypeus. Antennae black. The third joint cross-oval, its length less than its height. Arista apical, brown, its length equal to the distance from ocellar bristles to lower edge of palpi. Palpi metallic, brilliant, green with brown bristles. Postocular bristles yellow. Thorax metallic, brilliant, green, densely dusted brown, mesonotum without stripes. Propleurae with 2 black bristles, about equal in length. Dorsocentral bristles hardly differing in length. 3 pairs of comparatively robust dorsocentral bristles. Robust dorsocentral bristles absent before suture. Acrostichal bristles well developed, length of hindmost one exceeding the distance between the rows of acrostichal bristles. From the line connecting sutural bristles towards scutellum 3 pairs of acrostichal bristles. Between head and sutural bristle more than 10–11 bristles. 2 notopleural and 2 supraalar bristles. Scutellum with 4 bristles. Wings hardly darkened with brown veins. Apical section of  $m_{1+2}$  slightly longer than basal section of same vein.  $r_{4+5}$  and  $m_{1+2}$  converging to the apex, at the top of the wing parallel. Apical section of  $m_{1+2}$  slightly curved. Proportions of the length of the apical section of  $m_{3+4}$  and the length of the hind crossvein as 1.7/1.3. Halteres yellow. Squamae yellow with yellow bristles. Legs greenish-brown, knees dingy yellow. Middle tibiae with 1 antero-dorsal and 1 posterodorsal bristles at the base. Hind femora with a row of short anteroventral bristles at the top. Hind tibiae with 1 robust dorsal bristle at the base. First joint of hind tarsi with a small tooth on the inner side. Proportions of the first joint of hind tarsi and the second joint as 1.8/3.7. Abdomen metallic, brilliant, brownish-green. Hypopygium big. Gonopods not divided at apex into dorsal and ventral lobes. Surstyli consisting of 2 bristles having a common base and separated from epandrial base and located at the same height. Cerci with robust bristles and hairs on the dorsal side. Hypandrium narrow, long.

Female differing from male by a wider face.

Length 4.5 mm, wing length 4.5–4.7.

Holotype: ♂ Mongolia, Archangaj aimak, Changaj Gebirge, Somon Ichtamir and Somon Çuluut, 20 km W von Ichtamir, 2150 m, 19. 6. 1966 (Nr. 546) (deposited in Natural History Museum, Budapest).

Paratypes: 7 ♂, 5 ♀, ibid (one ♂ and one ♀ deposited in Leningrad).

***Medetera subtristis* sp. n. (Fig. 8–15.)**

Male. Frons dark green, dusted brown. Face brilliant, metallic green, narrowed above middle of epistoma, with the edges widening below. Antennae black. Third joint of antennae not large, with a small hollow at the base of arista; its length less

than its width. Upper edge of third joint longer than lower one. Arista dark, its length equal to the distance from the lower edge of the head to the upper edge of the antennae. Postocular bristles dark. Thorax black with a greenish brown reflection, densely covered with a greyish pruinosity. Propleurae with 2 brown bristles, lower one longer than upper one. Dorsocentral bristles becoming noticeably longer from front edge of mesonotum to scutellum. 3-4 pairs of robust dorsocentral bristles. Acrostichal bristles well developed. 2 supraalar bristles. Scutellum with 4 marginal bristles. Legs, including coxae, black, knees dark brown. Coxae and femora with black bristles. Fore femora with several hardly lengthened posterodorsal bristles at the top. Middle femora from the frontal side with a row of long bristles better developed at the top of femur, their length exceeding  $1/2$  of the width of femur at the point of the base of the bristle. Middle tibiae with 1 antero- and 1 posterodorsal bristles at the base. Hind femora with long anterodorsal bristles at the base and with long bristles at the top from the frontal side and on antero-

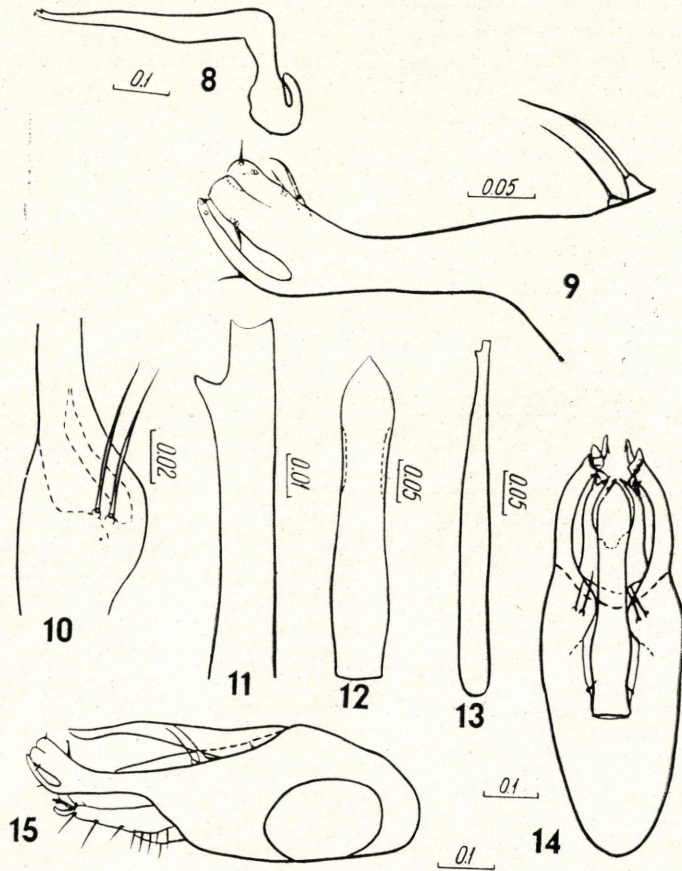


Fig. 8-15. *Medetera subtristis* sp. n. — phallus, lateral (8); end of hypopygium, lateral (9); base of gonopods and surstyli, ventral (10); end of phallus, ventral (11); hypandrium, ventral (12); phallus, ventral (13); hypopygium, ventral (14); hypopygium, lateral (15)

dorsal side. Hind tibiae with several pale bristles at the top on dorsal side. Proportions of hind tarsal joints I/II as 1.7/2.5. Wings scarcely darkened.  $r_{4+5}$  and  $m_{1+2}$  converging, in the apical part parallel. Apical section of  $m_{1+2}$  scarcely curved, slightly exceeding the length of the basal section. Proportions of the length of outer crossvein and the length of apical section of  $m_{3+4}$  as 1.1/2.6. Squamula and cilia dusky brown. Halteres dark. Abdomen dark, dusted greyish, with brown hairs. Hypopygium dark. Basal part of gonopods straight, at the apex abruptly curved to the ventral side. Ventral lobe of gonopods well developed, 3–4 times larger than the dorsal lobe of gonopods. Each of the bristles of surstylus with a separate base, the inner one better developed than the outer one. Hypandrium long, narrowed in the middle. Phallus at the left hand top with a small appendix. Cerci long, narrow.

Female. Face wider than in male.

Length 2.0–2.9 mm, wing length 2.0–2.7 mm.

Holotype: ♂ USSR, Port Baical, 24. 6. 1965, leg. NEGROBOV (deposited in Leningrad). Paratypes: 3 ♂, USSR, Port Baical, 24. 6. 1965, leg. NEGROBOV; Mongolia, Central aimak: Ulan-Baator, Nucht, im Bogdo ul, 1650 m, 4. 6. 1966, 1 ♂, 1 ♀, (Nr 493); Archangaj aimak: Changaj Gebirge, zwischen Somon Ichtamir und Somon Culut, 20 km W von Ichtamir, 2150 m, 19. 6. 1966, 8 ♂, 4 ♀ (Nr 544); Changaj Gebirge, 8 km W von Somon Urdtamir, 1620 m, 19. 6. 1966 (Nr 538).

#### *Medetera* sp. aff. *mongolica* NEGROBOV

1 ♀, Mongolia, Suchebaator aimak, 25 km N von Somon, Bajanterem, 950 m, 1.8.1965 (Nr. 345).

Key to the species of the genus *Medetera* from Mongolia:

- |    |      |  |                                 |
|----|------|--|---------------------------------|
| 1  | (4)  | Last section of $m_{3+4}$ at least 1.5 times as long as outer crossvein. |                                 |
| 2  | (3)  | Legs black .....   | <i>M. subtristis</i> , sp. n.   |
| 3  | (2)  | Legs yellow .....  | <i>M. kaszabi</i> , sp. n.      |
| 4  | (1)  | Last section of $m_{3+4}$ shorter than outer crossvein.                  |                                 |
| 5  | (8)  | Thorax with 3 pairs of dorsocentral bristles.                            |                                 |
| 6  | (7)  | Scutellum with 2 bristles .....  | <i>M. macacea</i> Lw.           |
| 7  | (6)  | Scutellum with 4 bristles .....  | <i>M. mongolica</i> NEGROBOV    |
| 8  | (5)  | Thorax with more than 3 pairs of dorsocentral bristles.                  |                                 |
| 9  | (10) | Tibia yellow .....   | <i>M. latipennis</i> , sp. n.   |
| 10 | (9)  | Tibia black  |                                 |
| 11 | (12) | Thorax with cross stripes .....  | <i>M. brunea</i> , sp. n.       |
| 12 | (11) | Thorax without stripes .....   | <i>M. spinulicauda</i> , sp. n. |

