

A NEW NEOTROPICAL *CULICOIDES* FROM MINAS GERAIS (DIPTERA: CERATOPOGONIDAE)

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The purpose of this paper is to present the description of a new species of *Culicoides* from Felixlândia, Minas Gerais, collected by Ricardo Lourenço de Oliveira during an investigation of the vector of *Trypanosoma minasense* in marmosets *Callithrix penicillata* and given to the author for determination.

Culicoides minasensis Felipe-Bauer,
new species (Figs. 1-9)

Female: Wing length 1.16 (1.13 - 1.22, n = 8)mm; breadth 0.48 (0.46 - 0.52, n = 8)mm. **Head:** Dark brown. Eyes (Fig. 2) broadly separated by the width of 1.5 - 2 ommatidial facets, with short interfacetal hairs. Antenna (Fig. 3) with lengths of flagellar segments in proportion of 15-13-14-15-16-16-16-16-17-18-19-19-27; antennal ratio 0.82 (0.79 - 0.87, n = 8); sensilla coeloconica present on segments 3, 8-10, rarely also on 7, single on 3-8, double on 9 and triple on 10. Palpus (Fig. 7) with lengths of segments in proportion of 8-27-28-10-12; third segment slender, slightly swollen distally, with a moderately deep sensory pit on distal portion; palpal ratio 2.7 (2.6 - 2.9, n = 8). Proboscis moderately long, P/H ratio 0.90 (0.84 - 0.95, n = 8), mandible with 13-16 teeth. **Thorax:** Dark brown, scutum without prominent pattern in slide mounted. **Legs** (Figs. 4 - 6) dark brown, knee spots blackish, fore - and midfemora with irregular subapical, and all tibiae with subbasal, narrow pale rings; hind tibial comb (Fig. 9) with 4 spines, the one nearest the spur longest. **Wing** (Fig. 1) with pattern as figured; membrane infuscated and pale spots small and definite; cell R5 with 4 pale spots, one, round, lying on distal side of r-m vein, the crossvein dark; two poststigmatic spots, the anterior one small and rounded well separated from the posterior one, which is transverse and located behind 2nd radial cell, 1 small and transverse pale spot in middle of distal portion of cell R5, not reaching wing margin or vein M1; cell M1 with 2 pale spots, the distal one lying far from wing margin; cell M2 and M4, each with a round distal pale spot not reaching wing mar-

gin; 2 pale spots present behind medial fork and in front of mediocubital fork; anal cell with a faint pale spot in anal angle and a transverse double pale spot in distal portion; veins dark to the tip; macrotrichia numerous on distal half of the wing; costal ratio 0.61 (0.60 - 0.62, n = 8). Halter brown. **Abdomen:** Dark brown. Spermathecae (Fig. 8) 2 plus rudimentary third and a cylindrical sclerotized ring; ovoid slightly unequal, measuring 0.055 by 0.041mm and 0.052 by 0.040mm with a very short and not sclerotized neck.

Male: Unknown.

Distribution: Brazil.

Types: Holotype ♀, Ponte Nova, Felixlândia (18° 46' S 44° 54' W), Minas Gerais, BRASIL, 30-X-1986, R. Lourenço de Oliveira col., biting on marmoset. Paratypes, 6 ♀♀ as follows: 1 ♀ same data as holotype; 3 ♀♀, same data as holotype except 2-XI-1986, biting man; 1 ♀, Limeira, Felixlândia, MG, BRASIL, 3-XI-1986, R. Lourenço de Oliveira col., biting man; 1 ♀, EPAMIG, Faz. Exp. Guimarães Rosa, Felixlândia, MG, 31-X-1986, R. Lourenço de Oliveira col., animal trap. [Holotype (no. 152) and part of paratypes (no. 153-156) in Instituto Oswaldo Cruz, Rio de Janeiro, Brazil; 2 paratypes: 1 ♀, same data as holotype except biting man, deposited in National Museum of Natural History, Smithsonian Institution, Washington, D.C., U.S.A.; 1 ♀, same data as holotype except 2-XI-1986, biting man, deposited in Depto. de Epidemiologia, Faculdade de Saúde Pública, Universidade de São Paulo, São Paulo, Brazil.]

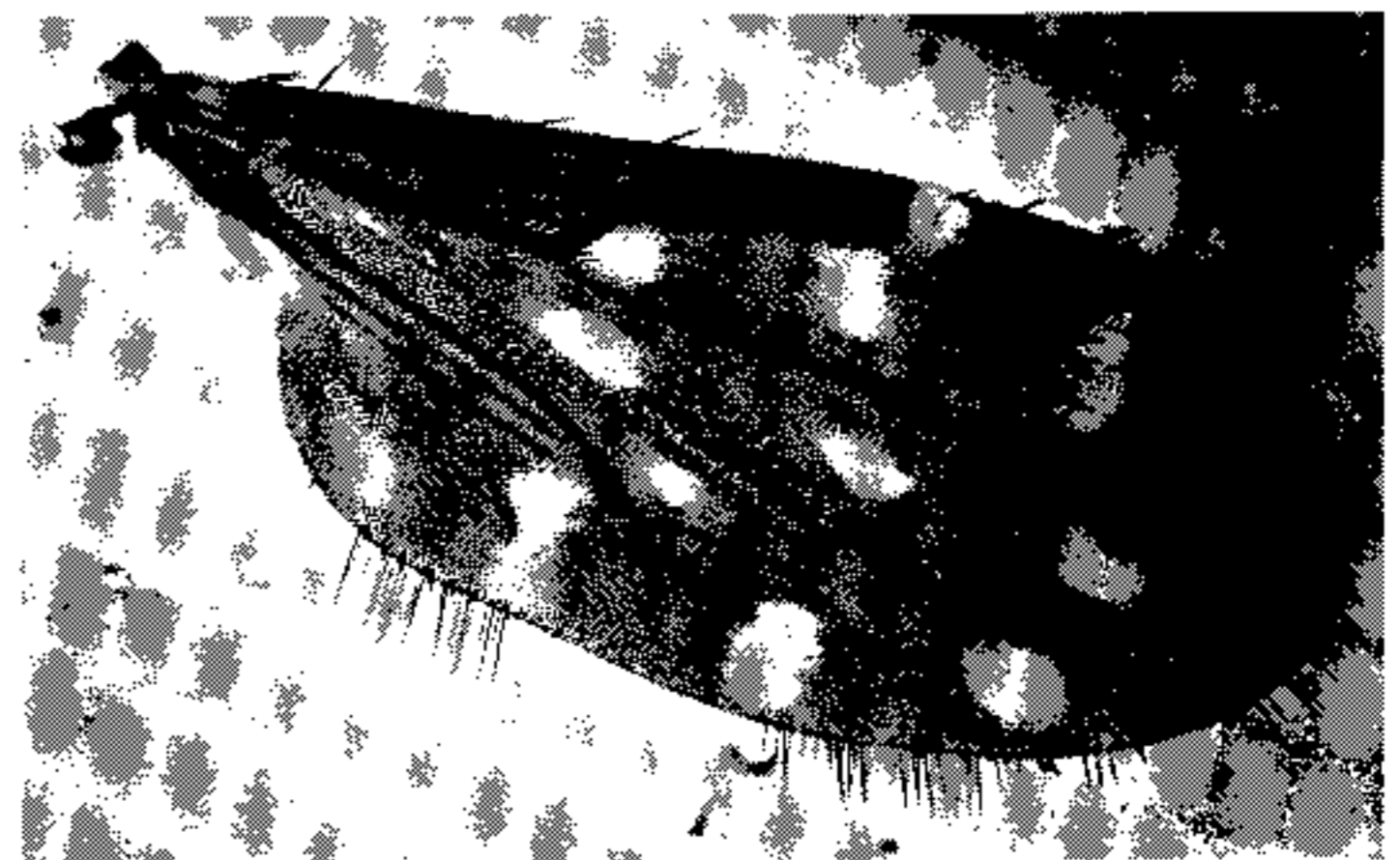
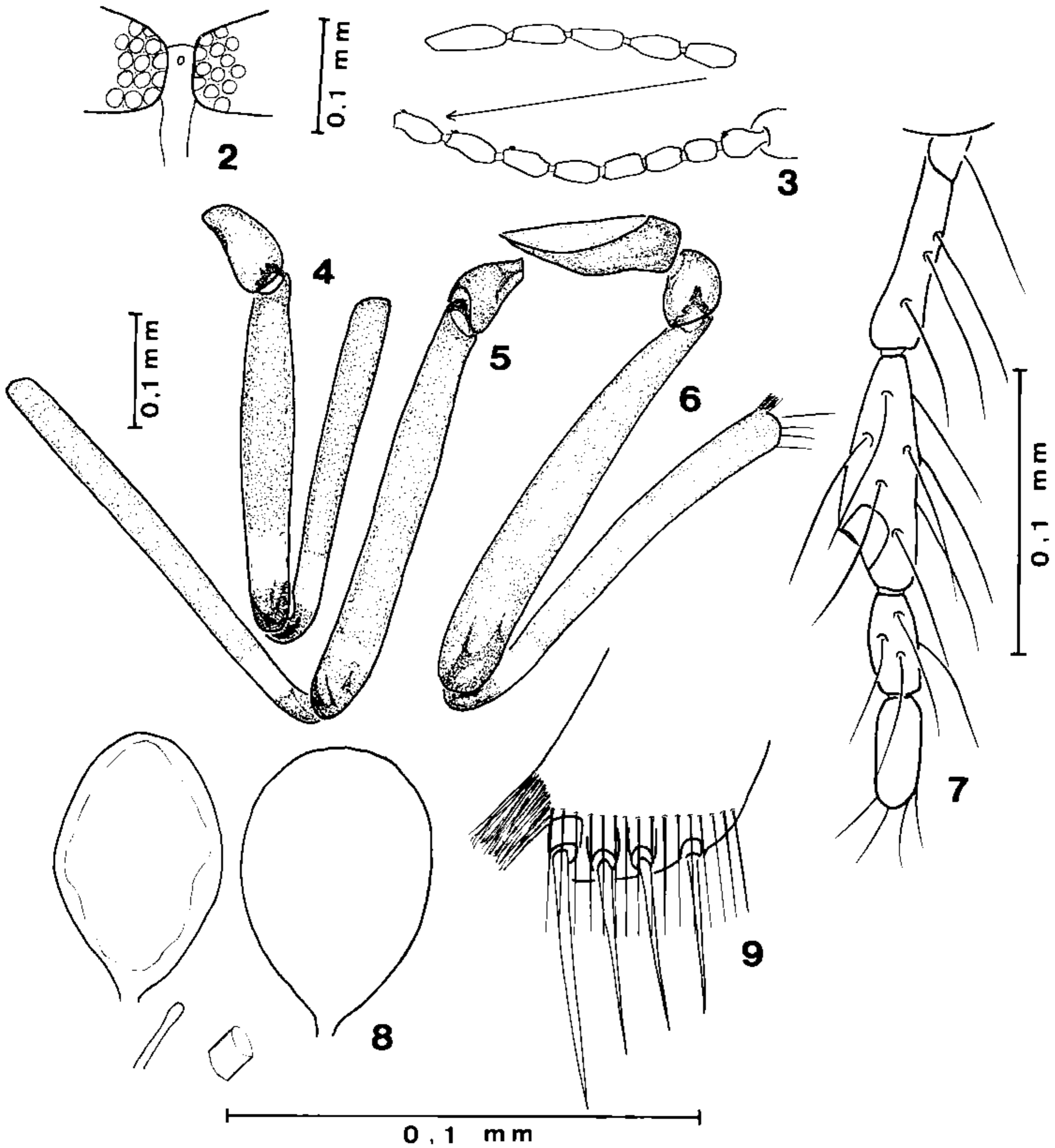


Fig. 1: Photograph of wing of female *Culicoides minasensis* n.sp.



Figs. 2 - 9: *Culicoides minasensis* n.sp., female: 2, eye separation; 3, antenna; 4, fore leg; 5, mid leg; 6, hind leg; 7, palpus; 8, spermathecae; 9, hind tibial comb.

Discussion: This species is named after the State of Minas Gerais, where it was collected.

Culicoides minasensis is a member of *Culicoides debilipalpis* group and most similar in wing pattern to *Culicoides mirsae* Ortiz (1953, Rev. Sanidad Asist. Soc., 18: 797-806). Both species do not have the pale spot centered on vein r-m but located on distal side. The new species differs by the lack of pale spot in front of midportion of mediocubital stem, eyes

broadly separated, palpal ratio 2.7 and brownish halter.

Regarding the peculiar aspect of the wing *C. minasensis* is also similar to *C. tarapaca* Spinelli & Wirth (1984, Rev. Soc. Ent. Argentina, 43: 171-185). It differs from the latter by the presence of pale rings on legs, transverse distal pale spot and well separated poststigmatic pale spots in cell R5.