



A list of Psocoptera (Insecta: Psocodea) from Brazil

Listado de Psocoptera (Insecta: Psocodea) de Brasil

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Abstract. The species of Psocoptera currently known for Brazil are listed, with state distribution and biogeographic status. The categories of geographic distribution are discussed, as well as some of the evidence indicating that the present size of the Brazilian fauna is underestimated.

Key words: Psocodea, Psocoptera, Brazil, geographic distribution.

Resumen. Se listan las especies de Psocoptera actualmente registradas en Brasil, incluyendo la distribución por estado y su categoría biogeográfica. Se presenta alguna de la evidencia que hace suponer que el tamaño actual de la fauna de Psocoptera de Brasil está subestimada.

Palabras clave: Psocodea, Psocoptera, Brasil, distribución geográfica.

Introduction

The Catalogue of the Psocoptera (Lienhard and Smithers, 2002) lists for Brazil 374 species in 87 genera and 29 families. We have updated this information, and the list presented here includes 425 species in 94 genera and 28 families (Table 1). The ‘Psocoptera’, a paraphyletic group, are the non-parasitic members of the order Psocodea (sensu Yoshizawa and Johnson, 2006: 358), which comprises also the ectoparasitic chewing and sucking lice (‘Phthiraptera’) (see Johnson et al., 2004). The list below is to be considered as a work in progress subject to modification as more information on the Brazilian psocid fauna becomes available.

Material and methods

The updating of the information on the Brazilian fauna in Lienhard and Smithers (2002) is derived mostly from the ongoing study of the vast Psocoptera collection in the Instituto Nacional de Pesquisas da Amazônia (INPA), in Manaus, Amazonas, and from the study of the Psocoptera collected through the program PPBio, housed in the Laboratory of Insect Systematics, Universidade Estadual

de Feira de Santana, Bahia, Brasil. The distributions in Table 1 were taken from the literature and from specimens in collections (mostly INPA and Colección Nacional de Insectos, CNIN, Instituto de Biología, Universidad Nacional Autónoma de México, México City).

Results

Table 1 presents the list of species of Psocoptera known in Brazil; 425 species are listed, in 94 genera and 28 families. The largest and most diverse family is Psocidae, with 89 species in 23 genera, followed by Ptiloneuridae (50 species in 5 genera), Epipsocidae (48 species in 6 genera), and Lachesillidae (41 species in 6 genera). The most speciose genera (*Lachesilla*, *Triplocaenia*, *Epipsocus*, *Archipsocus*, *Mesepipsocus*, and *Valenzuela*) account for 135 species, and on the other extreme, 32 genera are represented by 1 species and 11 genera have 2 species. It is likely that *Notolepium brasiliense* New will have to be transferred to *Thylacella* (cf. Mockford, 2005). Twelve additional genera (*Thylacella*, *Cyptophania*, *Neolepolepis*, *Lepinotus*, *Nanopsocus*, *Peritroctes*, *Epitroctes*, *Compsocus*, *Spurostigma*, *Pararchipsocus*, *Tricholachesilla* and *Palmicola*) probably occur in Brazil (García Aldrete and Mockford, unpublished data), but they have not yet been detected.

Table 1. Psocoptera recorded from Brazil, distribution and biogeographic status. The species not listed by Lienhard and Smithers (2002) are marked with an asterisk (*). Most of them are new to Brazil, otherwise the references to published records are given

- Trogiomorpha
- Lepidopsocidae
1. *Nepticulomima brasiliensis* (Enderlein). Pará (Endemic).
 2. *N. pulvillata* New. Mato Grosso (Endemic).
 3. *Notolepium brasiliense* New. Mato Grosso (Endemic).
 4. *Proentomum personatum* Badonnel. Roraima (Tropical waif).
 5. *Soa flaviterminata* Enderlein. Amazonas, Pará, Roraima (Widely distributed).
 6. *S. violacea* New. Amazonas, Mato Grosso (Endemic).
 7. *Echmepteryx angusta* New. Mato Grosso (Endemic).
 8. *E. bishopi* New. Mato Grosso (Endemic).
 9. *E. falco* (Badonnel). Amazonas, Bahia (Tropical waif).
 10. *E. fuscata* New. Mato Grosso (Endemic).
 11. *E. lealae* New. Pernambuco (Endemic).
 12. *E. lutosa* Mockford. Roraima (Endemic).
 13. *E. madagascariensis* (Kolbe). Rio de Janeiro, Bahia (Tropical waif). (*). New for Brazil.
 14. *E. uniformis* Mockford. Roraima (Endemic).
 15. *Pteroxanium* sp. "Brazil" (Endemic).
- Trogiidae
16. *Cerobasis guestfalica* (Kolbe). Pernambuco, Rio de Janeiro (Widely distributed).
- Psoquillidae
17. *Psoquilla marginepunctata* Hagen. Mato Grosso, Santa Catarina (Widely distributed).
 18. *Rhyopsocus rafaeli* García Aldrete. Amazonas (Endemic). (*). See García Aldrete (2004a).
- Psyllipsocidae
19. *Psocathropos lachlani* Ribaga. Amazonas, São Paulo (Widely distributed).
 20. *Psyllipsocus yucatan* Gurney. Pará (Brazil, Mexico). (*). New for Brazil.
- Troctomorpha
- Troctopsocidae
21. *Troctopsocus brasiliensis* New. Mato Grosso (Brazil, Mexico).
 22. *Troctopsocus separatus* (Roesler). Santa Catarina (Brazil, Trinidad).
- Musapsocidae
23. *Musapsocus mockfordi* New. Amazonas (Endemic).
 24. *M. newi* Mockford. Roraima (Endemic).
- Amphientomidae
25. *Seopsocus acuminatus* Roesler. Santa Catarina (Endemic).
 26. *S. albiceps* Mockford. Roraima (Endemic).
- Liposcelididae
27. *S. fasciatus* Mockford. Roraima (Endemic).
 28. *S. rafaeli* Mockford. Roraima (Endemic).
 29. *S. rotundatus* Roesler. Santa Catarina (Endemic).
 30. *Belaphosocus badonneli* New. Mato Grosso (Brazil, Colombia, Mexico, Paraguay).
 31. *Belaphotroctes brunneus* Badonnel. São Paulo (Endemic).
 32. *B. ghesquierei* Badonnel. Mato Grosso, Roraima, São Paulo (Widespread in tropical Africa and America).
 33. *B. major* Badonnel. Mato Grosso (Endemic).
 34. *B. mimulus* Badonnel. São Paulo (Endemic).
 35. *B. ocularis* Badonnel. São Paulo (Endemic).
 36. *B. striatus* Badonnel. São Paulo (Endemic).
 37. *B. vaginatus* Badonnel. São Paulo (Endemic).
 38. *Belapha* sp. Pará (Endemic). (*). New for Brazil.
 39. *Chaetotroctes lenkoi* Badonnel. Mato Grosso (Endemic).
 40. *Embidopsocopsis newi* Badonnel. Mato Grosso (Endemic).
 41. *Embidopsocus brasiliensis* Badonnel. São Paulo (Endemic).
 42. *E. flexuosus parvulus* Badonnel. Mato Grosso (Endemic).
 43. *E. frater* Badonnel. São Paulo (Endemic).
 44. *E. leucomelas* (Enderlein). Mato Grosso (Brazil, Paraguay).
 45. *E. luteus* Hagen. Mato Grosso (Brazil, Cuba, Mexico).
 46. *E. mendax* Badonnel. Mato Grosso, São Paulo (Brazil, Argentina).
 47. *E. pilosus* Badonnel. Mato Grosso, São Paulo (Endemic).
 48. *E. similis* Badonnel. Mato Grosso (Endemic).
 49. *E. virgatus* (Enderlein). Mato Grosso, São Paulo (Brazil, Argentina, Paraguay).
 50. *Liposcelis bostrychophila* Badonnel. Rio de Janeiro (Cosmopolitan).
 51. *L. entomophila* (Enderlein). Amazonas, Rio de Janeiro (Cosmopolitan). (*). New for Brazil.
 52. *L. fuscipes* Badonnel. São Paulo (Brazil, Mexico).
 53. *L. lenkoi* Badonnel. São Paulo (Endemic).
- Pachytroctidae
54. *Tapinella gamma* Mockford. Roraima (Endemic).
 55. *T. maracana* Mockford. Roraima (Endemic).
 56. *T. ornaticeps* Mockford. Roraima (Brazil, Venezuela).
 57. *Antilopsocus nadleri* Gurney. Mato Grosso (Brazil, Trinidad).
 58. *Pachytroctes brasilianus* Roesler. Santa Catarina

- (Brazil, Venezuela).
59. *Psyllotroctes plaumanni* Roesler. Santa Catarina (Endemic).
- Psocomorpha**
- Epipsocidae**
60. *Epipsocus acanthus* New. Amazonas (Endemic).
 61. *E. argutus* New. Amazonas (Endemic).
 62. *E. atratus* New. Amazonas, Roraima (Endemic).
 63. *E. badonneli* Mockford. Pará, Roraima (Endemic).
 64. *E. borgmeieri* Karny. Rio de Janeiro (Endemic).
 65. *E. foliatus* Mockford. Roraima (Endemic).
 66. *E. fuscareolatus* New. Amazonas (Endemic).
 67. *E. latistigma* Roesler. Santa Catarina (Endemic).
 68. *E. maculithorax* New. Amazonas (Endemic).
 69. *E. meruleus* New. Amazonas (Endemic).
 70. *E. pennyi* New. Amazonas (Endemic).
 71. *E. pereirai* Badonnel. Amazonas, Mato Grosso (Endemic).
 72. *E. phaeus* New. Amazonas, Roraima (Endemic).
 73. *E. quercus* Roesler. Santa Catarina (Endemic).
 74. *E. roraimensis* Mockford. Roraima (Endemic).
 75. *E. serenus* Roesler. Santa Catarina (Endemic).
 76. *E. stigmaticus* Mockford. Roraima (Endemic).
 77. *E. uniformis* New. Mato Grosso (Endemic).
 78. *E. verrucosus* New. Amazonas (Endemic).
 79. *E. willineri* New. Mato Grosso (Endemic).
 80. *Goja nebulosa* (Roesler). Santa Catarina (Endemic).
 81. *G. picta* (Banks). "Brazil"(Endemic).
 82. *G. plaumanni* (Roesler). Santa Catarina (Endemic).
 83. Genus ca. *Goja*. Bahia (Endemic). (*). New for Brazil.
 84. *Mesepipsocus brasilianus* (New). Mato Grosso (Brazil, Perú).
 85. *M. brasiliensis* (New). Amazonas (Endemic).
 86. *M. brevistigma* (New). Mato Grosso (Brazil, Perú).
 87. *M. brunellus* (New). Mato Grosso (Endemic).
 88. *M. capitulatus* (New). Amazonas (Endemic).
 89. *M. fuscatus* (New). Mato Grosso (Brazil, Perú).
 90. *M. newi* Badonnel. Sao Paulo (Endemic).
 91. *M. niger* (New). Mato Grosso (Brazil, Perú).
 92. *M. obscurus* (New). Mato Grosso (Endemic).
 93. *M. proctus* (New and Thornton). Pará (Brazil, Perú). (*). New for Brazil.
 94. *M. roesleri* (New). Mato Grosso (Endemic).
 95. *M. roncadorensis* (New). Mato Grosso (Endemic).
 96. *M. semicularis* (Mockford). Roraima (Endemic).
 97. *M. sinuatus* (New). Mato Grosso (Brazil, Perú).
 98. *M. taitubai* (New). Mato Grosso (Endemic).
 99. *Mesepipsocus* sp. 1. Bahia (Endemic). (*). New for Brazil.
 100. *Mesepipsocus* sp. 2. Bahia. (Endemic). (*). New for Brazil.
 101. *Neurostigma dispositum* Roesler. Amazonas, Mato Grosso, Santa Catarina, Sao Paulo (Brazil, Mexico, Perú).
 102. *N. enderleini* New. Amazonas (Endemic).
 103. *N. paucivenosum* New. Amazonas (Endemic).
 104. *N. radiatum* Mockford. Roraima (Endemic).
 105. *N. roesleri* New. Amazonas (Endemic).
 106. *N. xanthopterum* New. Amazonas (Endemic).
 107. *Papillopsocus oriximinaensis* García Aldrete. Pará (Endemic). (*). See García Aldrete 2005.

Dolabelllopsocidae

 108. *Dolabelllopsocus carcinus* Mockford. Roraima (Endemic).
 109. *D. catenatus* Mockford. Roraima (Endemic).
 110. *D. ctenatus* (New). Amazonas, Bahia, Mato Grosso (Brazil, Perú).
 111. *D. eertmoedi* Badonnel. Mato Grosso (Endemic).
 112. *D. flavipennis* (Roesler). Santa Catarina (Endemic).
 113. *D. intermedius* Eertmoed. Pará, Rondônia (Brazil, Trinidad). (*). New for Brazil.
 114. *D. lobatus* Mockford. Roraima (Endemic).
 115. *D. pectenatus* Eertmoed. Bahia (Endemic).
 116. *D. pictus* Mockford. Roraima (Endemic).
 117. *D. pygmaeus* (New). Mato Grosso (Endemic).
 118. *D. similis* Mockford. Roraima (Endemic).
 119. *D. spinosus* Mockford. Roraima (Endemic).
 120. *Isthmopsocus barbatus* Mockford. Roraima (Endemic).
 121. *I. breviceps* (New). Mato Grosso (Endemic).
 122. *I. lanceatus* Mockford. Roraima (Endemic).
 123. *I. luridus* New. Amazonas (Endemic).
 124. *I. ornatus* (New). Mato Grosso (Endemic).
 125. *I. radulatus* New. Bahia (Endemic).
 126. *I. speculatus* Mockford. Roraima (Endemic).

Cladiopsocidae

 127. *Cladiopsocus distinctus* Eertmoed. Paraná, Santa Catarina (Endemic).
 128. *C. dolosus* (Roesler). Santa Catarina (Endemic).
 129. *C. domesticus* (New). Mato Grosso (Endemic).
 130. *C. fuscus* (New). Mato Grosso (Endemic).
 131. *C. prionotus* (New). Amazonas (Endemic).
 132. *C. uncinatus* (New). Amazonas (Endemic).

Ptiloneuridae

 133. *Euplocania badonneli* New and Thornton. Rondônia (Brazil, Perú).
 134. *E. ca. badonneli* New and Thornton. Pará (Endemic). (*). New for Brazil.
 135. *E. cerata* New. Amazonas (Brazil, Perú).
 136. *E. marginata* New and Thornton. Pará (Brazil, Perú). (*). New for Brazil.
 137. *E. picta* New. Amazonas (Endemic).
 138. *E. picta* complex, sp. 1. Bahia (Endemic). (*). New for

- Brazil.
139. *E. picta* complex, sp. 2. Pará (Endemic). (*). New for Brazil.
140. *E. picta* complex, sp. 3. Pará, Roraima (Endemic). (*). New for Brazil.
141. *E. picta* complex, sp. 4. Goiás. (Endemic). (*). New for Brazil.
142. *Euplocania* sp. 1. Pará (Endemic). (*). New for Brazil.
143. *Euplocania* sp. 2. Amazonas (Endemic). (*). New for Brazil.
144. *Loneura amazonica* (New). Amazonas (Endemic).
145. *L. brasiliensis* Roesler. Santa Catarina (Endemic).
146. *L. maracaensis* García Aldrete. Roraima. (Endemic). (*). See García Aldrete 2004a).
147. *Loneura* sp. 1. Pará (Endemic). (*). New for Brazil.
148. *Loneura* sp. 2. Amazonas (Endemic). (*). New for Brazil.
149. *Loneura* sp. 3. Pará (Endemic). (*). New for Brazil.
150. *Loneura* sp. 4. Amazonas (Endemic). (*). New for Brazil.
151. *Loneura* sp. 7. Paraná (Endemic). (*). New for Brazil.
152. *Loneura* sp. 8. Paraná (Endemic). (*). New for Brazil.
153. *Ptiloneuropsis immaculata* Roesler. Rio de Janeiro (Endemic). See García Aldrete (2004b).
154. *Timnewia greeni* (New). Mato Grosso (Brazil, Ecuador).
155. *Triplocania ariasi* New. Amazonas, Bahia (Endemic).
156. *T. calcarata* New. Amazonas (Endemic).
157. *T. ca. calcarata* New, sp. 1. Goiás (Endemic). (*). New for Brazil.
158. *T. ca. calcarata* New, sp. 2. Goiás (Endemic). (*). New for Brazil.
159. *T. ca. calcarata* New, sp. 3. Rondônia (Endemic). (*). New for Brazil.
160. *T. caudata* New. Amazonas (Endemic).
161. *T. furcata* New. Mato Grosso (Endemic).
162. *T. ca. furcata* New. Amazonas, Goiás, Pará (Endemic). (*). New for Brazil.
163. *T. immaculata* New. Amazonas (Endemic).
164. *T. lunulata* New. Amazonas (Endemic).
165. *T. lucida* Roesler. Santa Catarina, Paraná (Endemic).
166. *T. magnifica* Roesler. Santa Catarina (Endemic).
167. *T. reflexa* Roesler. Santa Catarina (Endemic).
168. *T. rondoniensis* García Aldrete. Rondônia (Endemic).
169. *T. ca. tambopatensis* García Aldrete. Pará (Endemic). (*). New for Brazil.
170. *T. umbrata* New. Amazonas (Brazil, Perú).
171. *Triplocania* sp. 1. Bahia (Endemic). (*). New for Brazil.
172. *Triplocania* sp. 2. Goiás (Endemic). (*). New for Brazil.
173. *Triplocania* sp. 3. Rondônia (Endemic). (*). New for Brazil.
174. *Triplocania* sp. 4. Pará (Endemic). (*). New for Brazil.
175. *Triplocania* sp. 5. Pará (Endemic). (*). New for Brazil.
176. *Triplocania* sp. 6. Pará (Endemic). (*). New for Brazil.
177. *Triplocania* sp. 7. Pará (Endemic). (*). New for Brazil.
178. *Triplocania* sp. 8. Pará (Endemic). (*). New for Brazil.
179. *Triplocania* sp. 9. Pará (Endemic). (*). New for Brazil.
180. *Triplocania* sp. 10. Amazonas (Endemic). (*). New for Brazil.
181. *Triplocania* sp. 11. Pará (Endemic). (*). New for Brazil.
182. *Triplocania* sp. 12. Paraná (Endemic). (*). New for Brazil.
- Asiopsocidae
183. *Notiopsocus facilis* Mockford. Roraima (Endemic).
184. *N. neotropicus* (Machado-Allison and Papavero). Mato Grosso (Endemic).
185. *N. simplex* Banks. Amazonas, Roraima (Endemic).
186. *Pronotiopsocus amazonicus* Mockford. Amazonas (Endemic).
- Caeciliusidae
187. *Coryphaca inka* Enderlein. Amazonas, Santa Catarina (Brazil, Argentina, Perú).
188. *C. matona* (New and Thornton). Mato Grosso (Endemic).
189. *Stenocaecilius antillanus* (Banks). “Brazil” (Widespread in the American tropics).
190. *Stenocaecilius casarum* (Badonnel). Bahia (Widespread in the tropics). (*). New for Brazil.
191. *Valenzuela adrianae* (Mockford). Roraima (Endemic).
192. *V. albofasciatus* (Mockford). Roraima (Endemic).
193. *V. albomarginatus* (Enderlein). Rio de Janeiro (Endemic).
194. *V. cinalus* (New and Thornton). Mato Grosso (Endemic).
195. *V. claripennis* (Mockford). Roraima (Endemic).
196. *V. claristigma* (New and Thornton). Mato Grosso, Roraima (Brazil, Venezuela).
197. *V. clayae* (New and Thornton). Mato Grosso (Endemic).
198. *V. fasciatus* (Enderlein). Pará (Endemic).
199. *V. gemmatus* (Mockford). Roraima (Endemic).
200. *V. micans* (New and Thornton). Mato Grosso, Pará, Roraima (Endemic).
201. *V. nigroticta* (Williner). Paraná (Endemic).

202. *V. obscuripennis* (Mockford). Roraima (Endemic).
203. *V. paradistinctus* (New and Thornton). Mato Grosso (Endemic).
204. *V. posticoides* (Mockford). Roraima (Endemic).
205. *V. tuberculatus* (New and Thornton). Mato Grosso, Roraima (Endemic).
206. *Valenzuela* sp. "Brazil" (Endemic).
207. *Enderleinella occidentalis* Mockford. Roraima (Endemic).
208. *Xanthocaecilius eroticus* Mockford. Santa Catarina (Endemic).
209. *X. granulosus* Mockford. Roraima (Brazil, Mexico, Panamá, Venezuela).
210. *X. pallidus* Mockford. Roraima (Endemic).
- Stenopsocidae**
211. *Graphopsocus cruciatus* (Linnaeus). Pará, Rondônia (Holarctic, probably introduced).
212. *G. mexicanus* Enderlein. Paraná, Santa Catarina (Brazil, Mexico, Venezuela).
- Amphipsocidae**
213. *Dasypsocus nigrifrons* (Roesler). Santa Catarina (Brazil, Venezuela).
214. *D. roesleri* (New and Thornton). Mato Grosso (Brazil, Mexico, Venezuela).
215. *Polypsocus coleopterus* Roesler. Santa Catarina (Endemic).
216. *P. delunatus* Roesler. Santa Catarina (Endemic).
217. *P. falcifer* Roesler. Santa Catarina (Endemic).
218. *P. fastosus* Roesler. Santa Catarina (Endemic).
219. *P. fuscopterus* Mockford. Roraima (Endemic).
220. *P. griseolineatus* (Enderlein). Amazonas (Brazil, Perú).
221. *P. lineatus* Mockford. Roraima (Endemic).
222. *P. ohausianus* (Enderlein). Roraima (Brazil, Ecuador).
223. *P. selenius* Roesler. Amazonas, Santa Catarina (Brazil, Venezuela).
224. *P. serpentinus* Mockford. Amazonas, Roraima (Endemic).
225. *P. suffuscus* Roesler. Santa Catarina (Endemic).
226. *P. unicolor* Roesler. Santa Catarina. (Endemic).
- Dasydemellidae**
227. *Dasydemella gynopeza* Roesler. Santa Catarina (Endemic).
228. *D. setosa* Roesler. Santa Catarina (Endemic).
- Lachesillidae**
229. *Anomopsocus radiolosus* (Roesler). Mato Grosso (Brazil, Costa Rica, Mexico).
230. *Graphocaecilius interpretatus* Roesler. Paraná, Santa Catarina (Endemic).
231. *Notolachesilla maracana* Mockford. Roraima (Endemic).
232. *Prolachesilla* sp. Bahia. (Endemic). (*). New for Brazil.
- Brazil.
233. *Lachesilla acuminata* Mockford. Roraima (Endemic).
234. *L. aethiopica* Enderlein. Roraima (Tropical waif).
235. *L. amarilla* New. Mato Grosso (Endemic).
236. *L. ariasi* García Aldrete. Amazonas (Bolivia, Brazil). (*). See García Aldrete (2004a).
237. *L. bahiana* García Aldrete. Bahia (Endemic).
238. *L. belemensis* García Aldrete. Pará (Endemic).
239. *L. bicornata* New and Thornton. Mato Grosso, Roraima (Endemic).
240. *L. bimaculata* García Aldrete. Pará (Brazil, Belize, Panamá).
241. *L. brasiliensis* García Aldrete. São Paulo (Endemic).
242. *L. braticagua* García Aldrete. Pará (Brazil, Costa Rica, French Guiana).
243. *L. breviforceps* García Aldrete. Santa Catarina (Endemic).
244. *L. capreola* New. Mato Grosso (Endemic).
245. *L. carioca* García Aldrete. Rio de Janeiro (Endemic).
246. *L. columnaris* García Aldrete. Santa Catarina (Endemic).
247. *L. concava* García Aldrete. Río Grande do Sul, Santa Catarina (Brazil, Venezuela).
248. *L. convexa* García Aldrete. Bahia (Brazil, Panamá).
249. *L. cuala* García Aldrete. Pará, Paraná, Rio de Janeiro, Roraima, São Paulo (Brazil, Mexico, Panamá, Trinidad).
250. *L. falcata* García Aldrete. Roraima, São Paulo (Brazil, Bolivia).
251. *L. marginata* New and Thornton. Mato Grosso (Endemic).
252. *L. matogrossensis* García Aldrete. Mato Grosso (Endemic).
253. *L. megaforcepeta* Mockford. Roraima (Endemic).
254. *L. nevermanni* (Navás). Pará (Brazil, Costa Rica, Honduras, Panama, Trinidad). (*). New for Brazil.
255. *L. palmera* New. Mato Grosso (Endemic).
256. *L. papillata* García Aldrete. Pará (Brazil, French Guiana).
257. *L. patula* García Aldrete. Rondônia (Endemic).
258. *L. paulista* García Aldrete. São Paulo (Endemic).
259. *L. rugosa* García Aldrete. Rio de Janeiro, Santa Catarina, São Paulo (Brazil, Perú, Trinidad).
260. *L. tectorum* Badonnel. São Paulo (Widely distributed).
261. *L. teresiana* García Aldrete. Espírito Santo (Endemic).
262. *L. trunca* García Aldrete. Pará, Pernambuco (Brazil, Panamá).
263. *L. valvula* New and Thornton. Mato Grosso (Endemic).
264. *L. yanomami* Mockford. Pará, Roraima (Endemic).
265. *Lachesilla* sp. 1. Pará (Endemic). (*). New for Brazil.
266. *Lachesilla* sp. 2. Pará (Endemic). (*). New for Brazil.

267. *Nadleria alpha* Badonnel and García Aldrete. Pará (Brazil, Trinidad).
268. *N. gamma* Mockford. Amazonas (Brazil, Belize, Perú).
269. *N. mockfordi* Badonnel and García Aldrete. Pará (Endemic).
- Ectopsocidae**
270. *Ectopsocopsis cryptomeriae* (Enderlein). Río Grande do Sul (Cosmopolitan).
271. *Ectopsocus pumilis* (Banks). São Paulo (Widely distributed).
272. *E. ribagai* Enderlein. Pará (Brazil, Puerto Rico).
273. *E. richardsi* (Pearman). "Brazil" (Widely distributed).
274. *E. titschacki* Jentsch. Pará (Tropical waif).
275. *E. vilhenai* Badonnel. Pará (Tropical waif). (*). New for Brazil.
- Peripsocidae**
276. *Peripsocus australis* Mockford. Santa Catarina (Endemic).
277. *P. nubifer* Mockford. Roraima (Endemic).
278. *P. pauliani* Badonnel. "Northern Brazil" (Widely distributed).
279. *P. phacelledomi* New. Pernambuco (Endemic).
280. *P. placidus* Mockford. Roraima (Endemic).
281. *P. subtristis* Mockford. Roraima (Endemic).
282. *P. teutonicus* Mockford. Santa Catarina (Endemic).
283. *P. tristis* Mockford. Roraima (Endemic).
- Archipsocidae**
284. *Archipsocus frater* (Mockford). São Paulo (Brazil, Florida, Jamaica, Mexico).
285. *A. inornata* New. Mato Grosso, São Paulo (Brazil, Mexico, Panamá, Surinam, Trinidad, Venezuela).
286. *A. virgata* New. Pará, Roraima (Brazil, French Guiana, Surinam, Venezuela).
287. *Archipsocus badonneli* New. São Paulo (Brazil, Colombia, Venezuela).
288. *A. brasiliensis* Enderlein. Pará (Brazil, Paraguay, Puerto Rico).
289. *A. broadheadi* Badonnel. Pará (Brazil, Panamá).
290. *A. castrii* Badonnel. São Paulo (Brazil, Colombia).
291. *A. cervinus* New. Pará, Rio de Janeiro (Brazil, Colombia, Surinam, Venezuela).
292. *A. costalimai* New. Pará, São Paulo (Endemic).
293. *A. enderleini* New. Mato Grosso (Endemic).
294. *A. floridanus* Mockford. São Paulo (Brazil, Florida, Mexico).
295. *A. gibberophallus* New. Mato Grosso (Brazil, French Guiana).
296. *A. granulosus* Badonnel. Mato Grosso (Endemic).
297. *A. gurneyi* Mockford. Roraima (Brazil, Florida, Jamaica, Mexico).
298. *A. indentatus* Mockford. Roraima (Endemic).
299. *A. lenkoi* Badonnel. Roraima (Endemic).
300. *A. lineatus* New. Pará (Endemic).
301. *A. minutillus* New. Amazonas, Mato Grosso (Endemic).
302. *A. mockfordi* New. Mato Grosso, Pará, Roraima, São Paulo (Brazil, Panamá, Perú, Surinam, Trinidad, Venezuela).
303. *A. modestus* New. Mato Grosso (Brazil, Colombia).
304. *A. newi* Badonnel. São Paulo (Endemic).
305. *A. pearmani* New. Mato Grosso (Brazil, Panamá).
306. *A. tenebricosus* New. Mato Grosso (Endemic).
307. *Notarchipsocus fasciipennis* Mockford. Roraima (Endemic).
308. *N. macrurus* (New). Mato Grosso, Roraima (Brazil, Panamá, Trinidad).
- Pseudocaeciliidae**
309. *Pseudocaecilius tahitiensis* (Karny). Pará, Rio de Janeiro, Roraima (Widespread in the tropics).
310. *Scytopsocus coriaceus* Roesler. Santa Catarina (Brazil, Cuba, Jamaica, Mexico).
311. *S. difficilis* Roesler. Santa Catarina (Endemic).
312. *S. fluminis* Mockford. Roraima (Endemic).
313. *S. medialis* New and Thornton. Mato Grosso (Endemic).
- Philotarsidae**
314. *Haplophallus leopardina* (Williner). Paraná (Brazil, Argentina, Colombia).
315. *Aaroniella bruchi* (Williner). Roraima (Brazil, Argentina).
316. *A. glabra* New and Thornton. Santa Catarina (Endemic).
317. *A. recta* New and Thornton. Mato Grosso (Endemic).
- Elipsocidae**
318. *Nepiomorpha brasiliiana* Badonnel. São Paulo (Brazil, Mexico, Venezuela).
319. *N. cingulata* New. Mato Grosso (Endemic).
320. *N. dolosa* Badonnel. São Paulo (Endemic).
321. *N. pallida* New. Mato Grosso, Roraima (Endemic).
- Hemipsocidae**
322. *Hemipsocus pallidus* New and Thornton. Mato Grosso (Endemic).
- Psocidae**
323. *Amphigerontia* sp. "Brazil" (Endemic).
324. *Blaste alfineta* New. Mato Grosso (Endemic).
325. *B. amazonica* García Aldrete. Roraima (Endemic).
326. *B. caudata* Mockford. Roraima (Endemic).
327. *B. forcepata* New. Mato Grosso (Endemic).
328. *B. fuscimera* New and Thornton. Paraná (Endemic).
329. *B. hamata* Mockford. Roraima (Endemic).
330. *B. ligula* New and Thornton. Paraná (Brazil, Uruguay).
331. *B. longispina* Mockford. Roraima (Endemic).

332. *B. macrura* (New). Amazonas, Mato Grosso, Roraima (Endemic).
333. *B. obscura* (New). Mato Grosso (Endemic).
334. *B. plaumanni* New. Paraná (Endemic).
335. *B. richardsi* New. Paraná (Endemic).
336. *Blastopsocidus brasiliensis* (New). Mato Grosso (Endemic).
337. *Blastopsocus mockfordi* Badonnel. Roraima (Brazil, Colombia).
338. *Elaphopsocus glaphyrostigma* Roesler. Santa Catarina (Endemic).
339. *Elaphopsocus* sp. Amazonas (Endemic). (*). New for Brazil.
340. *Cerastipsocus beaveri* New. Mato Grosso, Paraná (Endemic).
341. *C. brasilianus* (Enderlein). Espírito Santo (Endemic).
342. *C. consocius* (Navás). “Brazil” (Endemic).
343. *C. fuscipennis* Burmeister. “Brazil” (Endemic).
344. *C. kolbei* New. Mato Grosso (Endemic).
345. *C. rugosus* New and Thornton. Paraná (Endemic).
346. *C. sivori* (Ribaga). São Paulo (Brazil, Uruguay). See Requena et al., (2007).
347. *C. willineri* New and Thornton. Paraná (Endemic).
348. *Cervopsocus medialis* New. Amazonas, Pará (Brazil, Belize, Perú).
349. *Dactylopsocus fumigatus* (Kolbe). Santa Catarina (Endemic).
350. *D. similis* Mockford. Roraima (Endemic).
351. *Eremopsocus crassicornis* (Kolbe). Minas Gerais, Santa Catarina (Brazil, Argentina, Uruguay).
352. *E. infumatus* McLachlan. Goiás (Brazil, Venezuela).
353. *E. nigripes* Mockford. Santa Catarina (Endemic).
354. *Psococerastis amazonica* New. Amazonas (Endemic).
355. *P. callangana* (Enderlein). Amazonas, Espírito Santo, Minas Gerais, Pernambuco, Rio de Janeiro, Santa Catarina (Brazil, Panamá, Perú).
356. *P. fasciata* Mockford. Amazonas, Espírito Santo, Pará, Rio de Janeiro, Santa Catarina (Brazil, Belize, Mexico, Panamá).
357. *P. hageni* New. Mato Grosso (Endemic).
358. *P. opulenta* (Navás). Amazonas, Goiás, Mato Grosso, Pará, Pernambuco, Rio de Janeiro, São Paulo (Widely distributed in tropical America).
359. *P. paraguayana* (Ribaga). Santa Catarina, São Paulo (Brazil, Paraguay).
360. *P. pictiventris* (Kolbe). Santa Catarina (Endemic).
361. *P. pyralina* (Kolbe). Minas Gerais, Santa Catarina (Endemic).
362. *P. stictica* (Banks). “Brazil” (Endemic).
363. *Brachinodiscus cinctipes* (Enderlein). “Brazil” (Brazil, Bolivia, Paraguay, Perú).
364. *Metylophorus bishopi* New. Mato Grosso (Endemic)
365. *M. calcaratus* Mockford. Roraima (Endemic).
366. *M. ctenatus* New. Mato Grosso (Endemic).
367. *M. fasciatus* New. Amazonas (Endemic).
368. *M. hispidus* Mockford. Roraima (Endemic).
369. *M. symmetricus* Mockford. Roraima (Endemic).
370. *M. theresopolitanus* (Enderlein). Rio de Janeiro (Endemic).
371. *Ophthalmopsocus ocularis* (Kolbe). “Brazil” (Endemic).
372. *O. pallidus* New. Mato Grosso, Roraima (Endemic).
373. *Indiopsocus paranensis* (New and Thornton). Paraná (Endemic).
374. *I. sinuatistigma* (New). Mato Grosso (Endemic).
375. *Psocidus albostigmus* (Banks). “Brazil” (Endemic).
376. *P. manausensis* New. Amazonas (Endemic).
377. *P. fuscatus* (Navás). “Brazil” (Endemic).
378. *P. kotzbaeueri* (Navás). “Brazil” (Endemic).
379. *P. nigricornis* (Brauer). “Brazil” (Endemic).
380. *P. proi* (Navás). Río Grande do Sul (Brazil, Argentina).
381. *P. punctaticeps* (Enderlein). “Brazil” (Endemic).
382. *P. quadrisignatus* (Banks). Amazonas (Endemic).
383. *P. simplex* (Enderlein). “Brazil” (Endemic).
384. *P. zikani* (Navás). “Brazil” (Endemic).
385. *Psocomesites continuatus* (Roesler). Pará (Endemic).
386. *Ptycta lunulata* New. Mato Grosso (Endemic).
387. *P. pearmani* New. Mato Grosso (Endemic).
388. *P. reticulata* New. Mato Grosso (Endemic).
389. *Steleops maculatus* New. Mato Grosso (Endemic).
390. *S. pedunculatus* (Enderlein). “Brazil” (Brazil, Paraguay, Perú).
391. *S. pulcher* New. Mato Grosso (Endemic).
392. *Trichadenotecnum circularoides* Badonnel. Roraima (Widely distributed).
393. *T. gonzalezi* (Williner). Roraima (Brazil, Argentina).
394. *T. pardus* (Badonnel). Pará (Widely distributed).
395. *T. punctipenne* New. Pernambuco (Endemic).
396. *T. roesleri* New. Mato Grosso (Endemic).
397. *T. simile* Mockford. Roraima (Endemic).
398. *T. sinuatum* New. Mato Grosso (Endemic).
399. *Dyctiopsocus pennicornis* (Burmeister). Amazonas, Santa Catarina (Brazil, Argentina, Venezuela).
400. *Poecilopsocus anticus* (Walker). Pará (Endemic).
401. *P. beaveri* (New). Mato Grosso (Endemic).
402. *P. bishopi* (New). Mato Grosso (Endemic).
403. *P. cinctus* (Enderlein). Amazonas (Endemic).
404. *P. leucotelas* (Walker). Pará (Endemic).
405. *P. richardsi* (New). Mato Grosso (Endemic).
406. *Thrysophorus formosus* Navás. “Brazil” (Endemic).
407. *T. speciosus* Burmeister. Pará (Brazil, French Guiana, Panamá, Perú, Surinam).
408. *Thrysopsocus aequatorialis* Enderlein. “Brazil”

(Brazil, Ecuador).

409. *T. bellus* (McLachlan). Pará (Brazil, Bolivia, Perú).

410. *T. brasiliensis* New. Amazonas (Endemic).

411. *T. elegans* (Enderlein). "Brazil" (Endemic).

Myopsocidae

- 412. *Lichenomima ariasi* (New). Amazonas, Roraima (Endemic).
- 413. *L. conspersa* Enderlein. Espírito Santo (Brazil, Paraguay).
- 414. *L. onca* Mockford. Roraima (Endemic).
- 415. *L. pulchella* (New and Thornton). Mato Grosso (Endemic).
- 416. *L. sparsa* (Hagen). Espírito Santo (Brazil, Canada, Cuba, Mexico, USA).
- 417. *L. thorntoni* Mockford. Roraima (Endemic).
- 418. *L. timmei* Mockford. Roraima (Endemic).
- 419. *Myopsocus albomaculatus* (New). Amazonas (Endemic).
- 420. *M. albus* García Aldrete. Roraima (Endemic).
- 421. *M. cinctus* (New). Amazonas (Endemic).
- 422. *M. minor* (New and Thornton). Mato Grosso (Endemic).
- 423. *M. parvus* Mockford. Roraima (Endemic).
- 424. *M. pennyi* (New). Amazonas (Endemic).
- 425. *M. vespertilio* Mockford. Roraima (Endemic).

Table 2 presents the categories of geographic distribution of the species listed in Table 1. The most important component is that of the endemics, resulting in a strikingly high level of endemism (73.41%); the second most important component is that of the species shared with other South American countries (54 species). It is likely that, as the South American fauna becomes better known, the level of endemism will decrease. The number of widely distributed species, and the group of South American species shared with Central America is relatively important, although small in relation to the size of the fauna. The usual assemblage of cosmopolitans and tropical waifs (9 species) is also present.

Discussion

Lienhard and Smithers (2002: Table 1) list 762 species of Psocoptera for South America. A conservative estimate of total species for South America is 1 300 species of Psocoptera, representing 13% of the world psocid fauna. García-Aldrete (2006) pointed out that, by the end of 2005, there were 5 557 described species in 474 genera; the potential total can be easily rounded up to 10 000 species, to account for the undescribed ones. The 13%

Table 2. Categories of geographic distribution of the Brazilian psocid fauna, and number of species in each

Category	Number of species
Endemic	312
South American (including Trinidad)	54
Widely distributed	16
South American, shared with Central America	7
Tropical waifs	6
South American, shared with Mexico	5
Shared with the Caribbean and Mexico	5
Shared with Central America	4
South American, shared with Central America and Mexico	3
Shared with Mexico	3
Cosmopolitan	3
Shared with Central America and Mexico	2
Shared with the Caribbean	1
Shared with the Caribbean and North America (other than Mexico)	1
Shared with North America, Caribbean and Mexico	1

above constitutes a gross underestimation, given that South America includes 4 megadiverse countries (Brazil, Colombia, Ecuador and Perú), and that the number of species in an extra-South American megadiverse country (Mexico) represents about 10% of the estimated world fauna (Mittermeier and Goetsch de Mittermeier, 1992; Llorente et al., 1996). In this context, Brazil, with 425 species recorded, stands as the richest country for Psocoptera in South America.

The nature of the Brazilian psocid fauna is, as expected, strongly South American, with many endemics and a good number of species shared with the surrounding countries; some species are also shared with the Caribbean area and with Central America (see Table 2). There is evidence indicating that the known size of the Brazilian fauna is underestimated; some of it is speculative, e.g. the psocid fauna of Mexico, also a megadiverse country, but nearly 4 times smaller than Brazil, is almost twice as large (Mockford and García-Aldrete, 1996; García-Aldrete, 2001); if psocid species diversity is proportional to geographical area, then many more species remain to be collected in Brazil. Other evidence comes from examination of a small fraction of the Psocoptera deposited in the INPA (Manaus, Amazônas) Invertebrate Collection, and the Psocoptera of the PPBio Program. In the latter, for example, 7 out of 8, in 5 genera, are new to science. In addition, the lack of records in 9 Brazilian states (Fig.1) almost certainly reflects a lack of collecting efforts and not genuine absences. It could be hypothesized that, in a medium time period, the psocid fauna of Brazil could be shown to be twice that presently recorded.



Fig. 1. Number of species of Psocoptera in each Brazilian state. Twenty three species in Table 1 are only listed from “Brazil”, so their distribution in the Brazilian states is unknown.

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