RESEARCH NOTES

STUDIES ON PHTHIRAPTERAN PARASITES (MALLOPHAGA)
INFESTING BIRDS IN THE PANDJAB

Taxonomic studies of Phthirapteran parasites of Indian birds may be said to have really commenced in 1914 with the work of Kellogg and Paine [Rec. Ind. Mus., 10 (3-12): 217-43]. Since then numerous papers have been published in various journals of repute in India and abroad. At the suggestion of Professor M. Afzal Husain, the author of this note developed a keen interest in these interesting though leathsome insects and first recorded his findings in the Proceedings of National Institute of Sciences, India [1947, 13 (6): 253-303; 1951, 17 (2): 127-203]. During recent years our knowledge of these parasites has tremendously expanded involving radical changes in the systematics of the group. During 1952-53, the author had an opportunity of working at the British Museum (Natural History), London, and comparing his specimens with the authenticated collection there. In his earlier communication, he had lumped numerous closely allied species under one name, primarily because with the facilities available at the Imperial Agricultural Research Institute, New Delhi, it was not possible for him to put the doubtful forms into the correct groupings. Harrison’s classical work “The Genera and Species of Mallophaga with Synonymy” (Parasitology, Cambridge, 1916, 9: 1-156) which was then available for reference, was also not clear about the specific status of several forms. The present note has been prepared to rectify these errors. Detailed descriptions of the new forms, briefly mentioned herein, are proposed to be presented, at a later date, in this Journal.

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Suborder: Ischnocera (Kellogg, 1896)

1. Brüelia sehri, sp. nov., from Trochalopteron lineatum grisescens (Hartert): Male with one tergo-central seta on III to VII tergites, tergites IV to VII with two tergo-lateral setae, VIII tergite with one tergo-lateral seta, tergite IX and the last tergite with 3 and 6 setae.

2. Brüelia chilchil, sp. nov., from Turdivides c. caudata (Dumont): Male with one tergo-central seta on Tergites III to VIII, V with one, VI to VII with 2-1 and VIII with 2 tergo-lateral setae. Tergite IX and the last with 2 and 4 setae respectively.

3. Brüelia galdum, sp. nov., from Pycnoptus cafer intermedius (Blyth): Male with one tergo-central seta on IV to VII, 2 to 3 on VIII and IX tergites,
Tergites VI to VII with 2 + 1, VIII with 1 = 1 and IX and the last with one tergo-lateral seta.

4. *Brueelia cambayensis*, sp. nov., from *Saxicolodes fidelius cambayensis* (Lath.): This species is similar to *B. guldum* but has an extremely pointed head and a sparse abdominal chaetotaxy.

5. *Brueelia gulabitilayar*, sp. nov., from *Sturnus rosen* (Linn.): Male with one tergo-central seta on V, VI and the last tergites; tergites VI and VIII with one and VII and IX with two tergo-lateral setae.

6. *Brueelia chittlatilayar*, sp. nov., from *Sturnus vulgaris kunai* Brooks: This species is similar to *B. gulabitilayar*, but the shape of its head and abdominal chaetotaxy warrant it to be considered a distinct form.

7. *Brueelia pagohorum*, sp. nov., from *Temenuchas pagohorum* (Gmel.): This species is also similar to the above two species but the head is narrower and the abdomen is very elongate with sparse chaetotaxy.

8. *Brueelia chayanh*, sp. nov., from *Acridothres t. tristis* (Linn.): The male of this species differs from the above three species in genital armature and abdominal chaetotaxy.

9. *Brueelia ginginianus*, sp. nov., from *Acridothres ginginianus* (Latham): Male with 2 tergo-central setae on VI to VIII tergites, 4 on IX and 1 on the last tergite. VIII tergite with 1 tergo-lateral seta.

10. *Brueelia munitia*, sp. nov., from *Uroloncha malaebica* (Linn.): The head is very typical. Male with 1 tergo-central seta on VI, VII and the last tergites and 4 on IX.

11. *Brueelia xanthocollis*, sp. nov., from *Gymnoris x. xanthocollis* (Burt.): This species is allied to *B. gulabitilayar*, but the head is greatly modified and wedge-shaped.

12. *Brueelia subtilis* (Nitzsch), from *Passer domesticus indicus* (Jard. and Selby): It is of common occurrence on this bird in our country.

13. *Brueelia parae*, sp. nov., from *Anthus richardi rufidus* Vieillot: This species resembles *B. munitia*. The metathorax is considerably reduced.


16. *Brueelia meinrichzageri* Ansari from *Dendrocitta rufa vagabunda* and *Dendrocitta vagabunda pallida* Blyth. Shot in Sind.

17. Philopterus atratus Nitzsch, from *Corvus fragilegas tschusii* Hartert: It is of common occurrence.

18. Philopterus lahorensis, sp. nov., from *Corvus s. splendens* (Vieillot): Male with 1 seta on 1, 9 to 12 on II to VIII, 7 on IX and 2 on last tergite. Male genitalia characteristic.

19. Philopterus fuscecollis (Burmeister) is of common occurrence on *Lasius pycnobarthor laithora* (Sykes).

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20. *Philopterus bijae*, sp. nov., from *Lanius schach erythronotus* (Vigors): It resembles *P. fuscicolor*. Female with 1 seta on I, 10 to 12 on II to VI, 7 to 8 on VII, 5 on VIII and 1 on IX tergite. IV to VII tergites with 1 lateral seta in addition.

21. *Philopterus kalkelichi*, sp. nov., from *Dicrurus macrorhynchus peninsularis* Tiechurst: This species differs from all the allied forms in the shape of the head, pterothorax and abdominal chaetotaxy.

22. *Philopterus fringillae* (Scopolii), from *Passer domesticus indicus* (Jard. and Selby): It is of common occurrence on our birds.

23. *Philopterus zohree*, sp. nov., from *Emberiza brunneiceps* Brandt: It resembles *P. fringillae*, but considerably differs in male genitalia.

24. *Philopterus ornatus* (Nitzch) is of most common occurrence on *Oriolus oriolus kunoor* (Sykes).

25. *Philopterus passercus* (Denny) is of common occurrence on *Motacilla alba duktunensis* (Sykes).

26. *Philopterus bonelliae*, sp. nov., from *Megalaima virens marshallorum* (Swinh): The male genitalia of this species does not resemble any allied form.

27. *Philopterus vagobanda*, sp. nov., from *Dendrocitta vagabunda pallida* Blyth: This species differs from the crow-inesting *Philopterus* in the shape of the head, pterothorax and abdominal chaetotaxy. The male genitalia is also of different pattern.

28. *Philopterus extraneus* (Piaget) was collected from the type host, *Corvus macrorhynchus* Walger.

29. *Philopterus vittae*, sp. nov., from *Lanius vittatus* Valche: This species differs from *P. bijae* in the clypeal region. The clypeal signature is considerably pulled backwards.

30. *Sturnioides chilchil*, sp. nov., from *Turdoides c. caudata* (Dumont): This species is furnished with very long abdominal hairs. Male genital armature very characteristic.

31. *Sturnioides guldun*, sp. nov., from *Pycnonotus cafer intermedius* (Jardon): This is a very typical species and cannot be confused with any species so far described.

32. *Sturnioides bituberculatus* (Giebel) is of common occurrence on *Dicrurus macrorhynchus peninsularis* Tiechurst.

33. *Sturnioides chendoolu*, sp. nov., from *Galarida cristata chendoolu* (Franklin): It differs from all the allied species in male genitalia. Basal plate very elongate, mesosomal plate heart-shaped.

34. *Sturnioides irritans*, sp. nov., from *Saxicola torquata indica* (Blyth): The pleural plates in this species are club shaped. Genital armature typical.


36. *Sturnioides atharoe*, sp. nov., from *Cyanosylvia s. suecica* (Linn.): Pro-thorax very strongly angulate. Tergal plates well developed running right across the breadth of the segments,

38. *Sturnidaceus pastoris* (Denny) is commonly found on *Stranus roratus* (Linn.).

39. *Sturnidaceus sturni* (Schrank) was taken off *Stranus vulgaris bennici Brooks.*

40. *Sturnidaceus affinis* (Piaget) was obtained from *Acridotheres t. cristis* (L.).

41. *Sturnidaceus banno*, sp. nov., from *Acridotheres gingesianus* (Lathi): The parameres are short and squat, not even reaching the posterior margin of the mesosomal plate.

42. *Degeeriella masumae*, sp. nov., from *Falco jugger* Gray: Basal plate oblong and narrow, at least 7 to 8 times as long as the parameres.

43. *Degeeriella splendens*, sp. nov., from *Cermeis timmimulus interstinctus* McClell: Basal plate elongate but not more than 5 times as long as the parameres.

44. *Degeeriella hauptecies*, sp. nov., from *Bustaurus teesa* (Franklin): It is allied to *D. masumae*, but differs in the shape of the head. Genitalia in male long and slender.

45. *Degeeriella vittata* (Giebel) commonly occurs on *Milvus migrans* govinda (Sykes).

46. *Strigiphilus rostratus* (Burmeister) was taken from *Tyto alba stratensis* Hart.

47. *Strigiphilus nudipes* (Piaget) was obtained from *Asio o. otus* (Linn.).

48. *Strigiphilus cursor* (Burmeister): Specimens were collected from *Asio o. otus* (Linn.).

49. *Strigiphilus goniodocercus* Eichler from *Bubo bubo bengalensis* (Franklin).

50. *Strigiphilus strigis* (Pontoppidan) from *Bubo bobo bengalensis* (Franklin).

51. *Strigiphilus bennae*, sp. nov., from *Otus bekkamoena* phimipes (Hume): This differs from the allied forms in the shape of the head and especially in the narrow elyptes.

52. *Cuculicola concolor*, sp. nov., from *Clamator j. jacobinus* (Boddaert): Basal plate elongate, parameres rod-like with typical heads.

53. *Cuculicola janilae*, sp. nov., from *Eudynamis s. scolopaceus* (Linn.): Basal plate long and broad, mesosomal plate transverse.

54. *Cuculococcus distinctus*, sp. nov., from *Clamator j. jacobinus* (Boddaert): Male genitalia characteristic, parameres considerably more reduced than in other species.

55. *Upupicola upupae* (Schrank) commonly occurs on *Upupa eops orientalis* Stuart Baker.

56. *Alcedoecus annularis*, sp. nov., from *Halcyn s. smyrnensis* (Linn.): Male genitalia with long basal plate, mesosomal plate with long tubular penis, parameres well developed, short sickle-shaped.

57. *Alcedoecus mahirgir*, sp. nov., from *Halcyn s. smyrnensis* (Linn.): Very feebly sclerotised species, pleural and tergal plates well formed.

58. *Alcedoecus macher*, sp. nov., from *Ceryle rufis leucomekura* Reichenb: In this species the tergal and pleural plates are well formed and

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sclerotized. The basal plate is slightly longer than the parameres, which are curved inwards at the tips.

59. *Capraella salaka*, sp. nov., from *Coracias b. benghalensis* (Linn.): It differs from the allied forms in the shape of the head, pterothorax and abdominal chaetotaxy. Male genitalia typical.

60. *Capraella pomona*, sp. nov., from *Coracias b. benghalensis* (Linn.): In this species the head is elongate, clypeal region truncate.

61. *Columbicola fulnchi* Eichler from *Streptopelia chinensis suratensis* (Gmel.).

62. *Columbicola thomae*, sp. nov., from *Streptopelia senegalensis cambayensis* (Gmel.): It differs from the allied forms in III antennal segment, and male genitalia.

63. *Columbicola confusissimus* Eichler was collected from *Streptopelia decapaeta decapaeta* (Frivaldsky).

64. *Columbicola hopkinsi*, sp. nov., from *Oenanthe picata* Blyth: In this species the clypeal region is comparatively longer than in other species.

65. *Coloceras aegypticum* (Kellogg et Paine) was collected from *Columba livia intermedia* (Strick).

66. *Coloceras lativentre* (Uchida) was taken from *Streptopelia chinensis suratensis* (Gmel.).

67. *Coloceras soffoticus* Eichler from *Streptopelia d. decapaeta* (Frivaldsky).

68. *Campanulotes compar* (Burmeister) is common on *Columba livia intermedia* (Strick).

69. *Falcopileurus gallivalerioi* Eichler from *Gyps himalayensis* Hume.

70. *Falcopileurus yasminae* Ansari was obtained from the Booted Eagle—*Hieraaetus pennatus* (Gmelin) shot in Shujawal (Tatta: Sind).

71. *Crasedorrhynchus spatula* (Giebel) was obtained from *Mivus migrans goinda* (Sykes).

72. *Crasedorrhynchus chicquerae*, sp. nov., from *Falco c. chicquerae* Daudin: Head truncate, with squarish clypeal signature. Tergal plates entire and feebles.

73. *Crasedorrhynchus triangularis* (Rudow) was taken off *Circaetus gallicus* (Gmelin).

74. *Crasedorrhynchus ranjhae*, sp. nov., from *Hieraaetus pennatus* (Gmelin): This species differs from the allied forms in the shape of tergal plates, male genitalia and tergal chaetotaxy.

75. *Carduiceps scalaris* (Piaget) was collected from *Philmachus pugnax* (Linn.).

76. *Lunaceps holophaeus* (Burmeister) was taken from *Philmachus pugnax* (Linn.).

77. *Lunaceps husaeni*, sp. nov., from *Erolia m. minuta* (Leist.): It differs from the allied forms in the shape of the head and slender body. The basal plate is short and narrow, parameres long and curved, mesosomal plate projecting as far as the parameres.

78. *Quadraceps lotus* (Nitzsch) commonly occurs on *Cursorius cursor cursor* (Latham).

79. *Quadraceps dasi* Tandon from *Lobivanellus i. indicus* (Boddaert).
80. *Quadraceps semifissus* (Nitzsch) was obtained from *Himantopus h. himantopus* (Linn.).

81. *Quadraceps hemichrous* (Nitzsch) was taken from *Himantopus h. himantopus* (Linn.).

82. *Quadraceps ochropi* (Denny) was collected from *Tringa ochropus ochropus* (Linn.).

83. *Quadraceps laborensis*, sp. nov., from *Philomachus pugnax* (Linn.): Pre-antennal area and hind head more or less equal in length. Parameres well developed, dagger-like with simple proximal heads.

84. *Anaticola magnifica*, sp. nov., from *Casarea ferruginea* (Vroeg.): The shape of the head, III antennal segment and male genital armature will distinguish this species from allied forms.

85. *Anaticola sordidus* (Giebel) was taken from *Nettion c. crecca* (Linn.).

86. *Anaticola fuliculac* (T. Muller) was collected from *Nyroca f. ferina* (Linn.).

87. *Anatoecus difficilis* Cummings was obtained from *Nyroca f. ferina* (Linn.).

88. *Anatoecus regina*, sp. nov., from *Casarea ferruginea* (Vroeg.): Pterothoracic chaetotaxy and shape of head will separate this species from the allied forms.

89. *Incisifrons fulicace* (Linn.) was collected from *Fulica a. atra* (Linn.).

Suborder: Amblycera (Kellogg, 1896)

90. *Ciconiphilus nyctardis* (Denny) from *Nycticorax n. nycticorax*: (Linn.).

91. *Colpocephalum bengalensis*, sp. nov., from *Corvus macrorhynchos* Wagler: Abdominal tergites with 2 rows of hairs. IX without downwardly and upwardly turned setae, IV sternite with 2 combs, and III: femora with 3 combs of setae.

92. *Colpocephalum laurencei*, nom. nov. (= *C. subaequale* nec Haan 1829), from *Corvus corax laurencei* Hume.

93. *Colpocephalum splendens*, sp. nov., from *Corvus splendens splendens* Vieill.: Male genital armature long, basal plate slender, parameres straight, genital sac complex.

94. *Colpocephalum griffonae*, sp. nov., from *Gyps himalayensis* Hume: Head broad than long, prothorax narrow, pterothorax short. III femora with 4 subequal combs of setae, III abdominal sternite with 2 combs of 10 to 11 setae.

95. *Colpocephalum zerafae*, sp. nov., from *Falco jugger* Gray: Prothorax well developed. III femora with 3 subequal combs of setae, III abdominal sternite with 2 combs of 13 to 18 setae.

96. *Myrsidea anaspila* (Nitzsch) was taken from *Corvus corax laurencei* Hume.

97. *Myrsidea splendens*, sp. nov., from *Corvus s. splendens* Vieill.: Prothorax large, III femora with a patch of 37 to 40 setae. II abdominal sternite with 3 to 4 heavy spines, IV to VII: with definite patches of setae.

98. *Myrsidea isostoma* (Nitzsch) was recorded from *Corvus frugilegus tschusii* (Hart.).

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99. Myrsidea brunnea (Nützsch) was collected from Nucifraga caryocatactes hemisphaica Vigors.

100. Myrsidea peninsularis, sp. nov., from Dicrurus macrocercus peninsularis Tiech., III: femora with a patch of 25 to 30 setae, II: sternite with 5 heavy spines, III to VII: with definite patches of setae.

101. Myrsidea trithorax (Piaget) from Corvus macrorhynchos: Wagler.

102. Myrsidea sindiana, sp. nov., from Dicrurus h. hottentotta (Linn.): Posterior femora with a patch of 23 hairs, III sternite with 5 to 6 heavy spines, V to VII: with definite patches of hairs.


104. Menacanthus laticeps Blagoj, commonly occurs on Corvus frugilegus tschusii (Hartert).

105. Menacanthus tristis Qadri was found from Acridotheres t. tristis (Linn.).

106. Menacanthus annulatus (Giebel) was collected from Passer domesticus indicusuard. and Selby.

107. Kurodaia subpachygaster (Piaget) from Tyto alba stratus Hartert.

108. Kurodaia longipes (Giebel) was collected from Bubo bubo benghalensis (Frank).

109. Actornithophilus hyalipunensis, sp. nov., from Tringa o. ochrophus Linn.: Head little longer than long. III femora with a patch of 18 to 20 setae, Tergites with 2 rows of setae, IV to VI sternites with definite patches of setae.

110. Actornithophilus raviensis, sp. nov., from Himantopus h. himantopus (Linn.): Head broader than long. III: femora with a patch of 28 setae, V to VI: sternites with definite patches of setae.

111. Austromenopon mohri, sp. nov., from Himantopus h. himantopus (Linn.): III: femora with patch of setae, IV to VI: sternites with dense submarginal setae.

112. Austromenopon sohni, sp. nov., from Tringa o. ochrophus Linn.: Head triangular with rounded front, tergal setae of irregular size, ventrum profusely hairy.

113. Trinoton nyrocae Eichler was collected from Nyroca f. ferina (Linn.).

114. Trinoton casarcae Eichler was obtained from Casarca ferruginea (Vroeg).

115. Laemobothris aquab, sp. nov., from Falco jugger Gray: Clypeal region trapezoidal, gular setae wanting. Inferior setae in I and II femora of specific importance.

116. Laemobothris siddiqi, sp. nov., from Circaetus ferox (Gmelin): Resembles L. aqua, but differs in chaetotaxy and tergal plates.

117. Laemobothris hieraeti Eichler was collected from Hieraetus pennatus (Gmel.).

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