

The current state of knowledge of the genus *Pterolophia* Newman, 1842 (Coleoptera, Cerambycidae: Lamiinae, Pterolophiini) of Philippines

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The paper presents a survey analysis of the genus *Pterolophia* Newman, 1842 of the Philippines. An annotated list of 52 species belonging to 6 subgenera is given.

Key words: Coleoptera, Cerambycidae, *Pterolophia*, Philippine.

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INTRODUCTION

In recent years, the fauna of long-horned beetles of the Philippines has been actively studied. However, there are some insufficiently studied taxa. The Philippines is one of the world's biodiversity hotspots. Therefore, it is important to obtain as much new information as possible about new findings of species, their ecology and biology. The publication of faunistic data on the fauna of the Philippines is of great importance.

The genus *Pterolophia* Newman, 1842 is very diverse taxon belonging to the subfamily Lamiinae and the tribe Pteropliini, and currently includes 834 difficult for the determination species divided in 30 subgenera (Tavakilian, Chevillotte 2022). The majority of species have fragmentary information about their distribution, and published data about trophic specialization and features of biology are very limited or lacking (Hawkeswood, 2011). The Philippines is the one of the poorly studied regions of South-

east Asia concerning taxonomic and faunistic problems of this genus. The present paper aimed to summarize the published data on *Pterolophia* of the Philippines.

MATERIAL AND METHODS

The present study is based on publications over a period of 180 years, beginning with the year of the description of the genus *Pterolophia* and several species in the first half of 19 century (Newman, 1842), first records of species of *Pterolophia* for the Philippines. The research was conducted using literature data processing and available databases (Tavakilian, Chevillotte 2022; Berzak 2022).

RESULTS

Based on the analysis of published references, an annotated list of *Pterolophia* of the Philippines was prepared, including 52 species belong-

ging to 6 subgenera: *Ale* Pascoe, 1865 (15 species), *Hylobrotus* Lacordaire, 1872 (8), *Paramimoron* Breuning, 1961 (3), *Pilosipraonetha* Breuning, 1961 (1), *Pterolophia* Newman, 1842 (24), and *Trichopraonetha* Breuning, 1961 (1 species). For each species is added data about distribution and references.

Subgenus *Ale* Pascoe, 1865

1. *Pterolophia albescens* Breuning, 1938 – Philippines (Breuning, 1938, 1961a, 1965).
2. *Pterolophia albohumeralis* Breuning, 1961 – Mindanao (Surigao, Butuan) (Breuning, 1961a, 1965).
3. *Pterolophia albovaria* Breuning, 1938 – Palawan (Breuning, 1938, 1961a, 1965).
4. *Pterolophia binaluana* Breuning, 1938 – Palawan (Binaluan) (Breuning, 1938, Breuning, De Jong, 1941, Breuning, 1961a, 1965).
5. *Pterolophia chekiangensis* Gressitt, 1942 – Philippines (Hua, 2002); China (Breuning, 1961a), T'ien-mu Shan, Chekiang (Gressitt, 1942), Zhejiang, Guangdong (Hua, 2002).
6. *Pterolophia crenatocristata* Breuning, 1938 – Philippines (Breuning, 1938, 1961a, 1965).
7. *Pterolophia hybrida* (Newman, 1842) – Philippines (Gemminger, Harold, 1873, Aurivillius, 1922, Breuning, 1961a); Luzon (Manilla) (Newman, 1842, Breuning, 1965); Mindanao (Mamungan) (Breuning, 1965); Leyte (Breuning, 1965); Negros (Breuning, 1965).
8. *Pterolophia idoneoides* Breuning, 1980 – Mindanao (Breuning, 1980, Hudepohl, 1983, Chemin, Vives, 2017).
9. *Pterolophia lumawigiensis* Breuning, 1980 – Mindanao (Agusan del Norte) (Breuning, 1980, Hudepohl, 1983).
10. *Pterolophia luzonica* Breuning, 1938 – Luzon (Breuning, 1938, Breuning, 1961a, Fujita, Hirayama, 2017), Manilla (Breuning, 1965), Ilocos Norte (Breuning, 1938), Nueva Vizcaya, Kayapa (Fujita, Hirayama, 2017).
11. *Pterolophia mindoroensis* Breuning, 1943 – Mindoro (Breuning, 1943, 1961a); Luzon (Laguna, Paete) (Breuning, 1965).
12. *Pterolophia palawanica* Breuning, 1938 – Palawan (North) (Breuning, 1938, 1961a, 1965, Lingafelter et al., 2014).
13. *Pterolophia sibuyensis* Breuning, 1938 – Sibuyan (Breuning, 1965).
14. *Pterolophia simillima* Breuning, 1938 – Mindanao (Breuning, 1961a), Davao (Breuning, 1938, 1965).
15. *Pterolophia spinosa* Breuning, 1938 – Luzon (Breuning, 1961a), Laguna, Paete (Breuning, 1938, 1965).

Subgenus *Hylobrotus* Lacordaire, 1872

16. *Pterolophia antennata* Breuning & de Jong, 1941 – Philippines (Breuning, 1961a); Sibutu (Breuning, De Jong, 1941, Breuning, 1965).
17. *Pterolophia bicirculata* Breuning, 1938 – Philippines (Breuning, 1961a; Mindanao (Butuan) (Breuning, 1965), Davao (Breuning, 1938, 1965); Surigao (Breuning, 1965); Lyete (Breuning, 1965).
18. *Pterolophia bicristata* Aurivillius, 1927 – Luzon (Aurivillius, 1927, Breuning, 1961, 1965).
19. *Pterolophia devitata* Aurivillius, 1927 – Philippines (Breuning, 1961a) Sibuyan (Aurivillius, 1927) Romblon (Lingafelter et al., 2014).
20. *Pterolophia innuganensis* Breuning, 1966 – Luzon (Innuga'n) (Breuning, 1966a).
21. *Pterolophia inplagiata* Breuning, 1980 – Mindanao (Breuning, 1980, Hudepohl, 1983, Chemin, Vives, 2017).
22. *Pterolophia lumawigi* Breuning, 1980 – Mindanao (Agusan del Norte) (Breuning, 1980, Hudepohl, 1983, Chemin, Vives, 2017).
23. *Pterolophia ochreosignata* Breuning, 1974 – Sibuyan (San Fernando) (Breuning, 1974).

Subgenus *Paramimoron* Breuning, 1961

24. *Pterolophia albolateralis* Breuning, 1938 – Palawan (Breuning, 1961a), Binaluan (Breuning, 1938, 1965).
25. *Pterolophia nigrocirculata* Breuning, 1938 – Mindanao (Bango) (Breuning, 1938, 1961b, 1965).
26. *Pterolophia speciosa* Breuning, 1938 – Luzon (Rizal) (Breuning, 1938, 1961b, 1965).

Subgenus *Pilosipraonetha* Breuning, 1961

27. *Pterolophia parapilosipes* Breuning, 1980 – Mindanao (Breuning, 1980, Hudepohl, 1983, Chemin, Vives, 2017).

Subgenus *Pterolophia* Newman, 1842

28. *Pterolophia aberrans* Aurivillius, 1927 – Samar, Polillo, Indonesia (Sumatra, Java (Toegoe)) (Aurivillius, 1927, Breuning, 1965, Lingafelter et al., 2014).
29. *Pterolophia aurivillii* Breuning, 1960 – Sibuyan (Romblon) (Breuning, 1965, Lingafelter et al., 2014).
30. *Pterolophia basilana* Breuning, 1938 – Basilan (Breuning, 1938, Breuning, 1961a, Breuning, 1965).
31. *Pterolophia bigibbera* (Newman, 1842) – Philipinnes (Gemminger, Harold, 1873, Aurivillius, 1922, Gressitt, 1956, Breuning, 1961a, Duffy, 1968, Breuning, 1974, Hua, 2002); Luzon (Vivac, Paete, Laguna, Mt. Babahao) (Gemminger, Harold, 1873, Heller, 1916, Aurivillius, 1927, Breuning, 1965), Manilla (Newman, 1842); Taiwan (Formosa (Bates), Botel-Tobago) (Gressitt, 1956, Breuning, 1965, Duffy, 1968, Hua, 2002, Chou, 2004, Niisato, Akiyama, Takakuwa, 2013, Grosser, Ambrus, 2021); Sri Lanka (Pascoe, 1857, Aurivillius, 1927); Mariana Islands (Gressitt, 1956, Breuning, 1961a, Duffy, 1968); Saipan (Ohbayashi, 1941, Iwata, 1993); Tinian, Rota (Iwata, 1993); Hawaiian Islands (Duffy, 1968); New Hebrides (Duffy, 1968); Bonin Islands (Chichi-jima, Ami-jima) (Kusama, Nara, Kusui, 1974); Guam (Tumon) (Iwata, 1993);

Japan (Hua, 2002, Ohbayashi, Niisato, 2007).

32. *Pterolophia binaluanica* Breuning & de Jong, 1941 – Palawan (Binaluan) (Breuning, De Jong, 1941, Breuning, 1961a, 1965).
33. *Pterolophia compacta* Breuning, 1938 – North Luzon (Breuning, 1938, 1961a, 1965).
34. *Pterolophia crassipes* (Wiedemann, 1823) – Philippines (Gemminger, Harold, 1873, Aurivillius, 1922, Hua, 2002, Lin, Tavakilian, 2019); Mindanao (Kolambugan) (Breuning, 1965); Palawan (Breuning, 1965); Luzon (Manilla) (Newman, 1842); Los Baños (Heller, 1916); Indonesia (Hua, 2002, Lin, Tavakilian, 2019) (Java (Mts. Tengger) (Wiedemann, 1823, Dejean, 1835, Pascoe, 1865, Breuning, 1965); East Kalimantan (Sugiarto, Mardji, 2016); Sumatra (Tjinta-Radja) (Breuning, 1965); Singapore (Breuning, 1965); Cambodia (Breuning, 1965); Vietnam (Tonkin) (Breuning, 1965); Malaysia (Lin, Tavakilian, 2019), Borneo (Mt. Kina-balu) (Gemminger, Harold, 1873, Aurivillius, 1922, Breuning, 1965); Sarawak (Pascoe, 1865); Macau (Gemminger, Harold, 1873, Aurivillius, 1922, Hua, 2002, Lin, Tavakilian, 2019); Sunda Islands (Breuning, 1961a); Australia (Hua, 2002); China (Guandong) (Löbl, Smetana, 2010).
35. *Pterolophia curvatocostata* Aurivillius, 1927 – Sibuyan (Aurivillius, 1927, Breuning, 1961a, 1965, Lingafelter et al., 2014).
36. *Pterolophia decolorata* Heller, 1924 – Luzon (Breuning, 1961a), (Los Baños) (Heller, 1924, Breuning, 1965).
37. *Pterolophia digesta* Newman, 1842 – Philippines (Newman, 1842, Gemminger, Harold, 1873, Aurivillius, 1922) Mindanao (Surigao) (Breuning, 1961a, 1965).
38. *Pterolophia flavopostscutellaris* Breuning, 1964 – Mindanao (Breuning, 1964).
39. *Pterolophia jacta* Newman, 1842 – Philippines (Gemminger, Harold, 1873, Aurivillius, 1922, Breuning, 1961a); Luzon (Mt. Isorog, Mt. Makiling (Breuning, 1965),

- Manilla (Newman, 1842), Los Baños (Heller, 1916)); Negros (Breuning, 1961c, 1965).
40. ***Pterolophia lateflavovittata* Breuning, 1966** – Mindanao (Pass Basaga) (Breuning, 1966).
 41. ***Pterolophia luzoncola* Breuning, 1938** – Luzon (Breuning, 1961a), (Ilocos Norte) (Breuning, 1938, 1965).
 42. ***Pterolophia mindanaonis* Breuning, 1943** – Mindanao (Butuan) (Breuning, 1943, 1961a, 1965).
 43. ***Pterolophia schultzeana* Breuning, 1962** – Samar, Borongan (Breuning, 1962, 1965).
 44. ***Pterolophia schultzei* Breuning, 1961** – Bucas Grande (Socorro) (Breuning, 1960, 1961d, 1965).
 45. ***Pterolophia secuta* (Pascoe, 1865)** – Philippines (Breuning, 1961a); Mindanao (Breuning, 1965); Kolabugan (Aurivillius, 1927); Indonesia (Celebes, Sumatra, Java) (Aurivillius, 1916, 1922, Breuning, 1961a, 1965, Duffy, 1968); Borneo (Gemminger, Harold, 1873, Aurivillius, 1922, Breuning, 1961a, Duffy, 1968); Malaysia (Sarawak) (Pascoe, 1865).
 46. ***Pterolophia sibuyana* Aurivillius, 1927** – Sibuyan (Aurivillius, 1927, Breuning, 1961a, 1965); Romblon (Lingafelter et al., 2014).
 47. ***Pterolophia transverselineata* Breuning, 1963** – Luzon (Alabad, Tayabas) (Breuning, 1963, 1965).
 48. ***Pterolophia univinculata* Heller, 1924** – Samar (Heller, 1924, Breuning, 1961a, 1965).
 49. ***Pterolophia vagevittata* Breuning, 1938** – Philippines (Breuning, 1938, 1961a, 1965).
 50. ***Pterolophia varians* Breuning, 1938** – Cebu (Breuning, 1938, 1961a, 1965).
 51. ***Pterolophia vitticollis* Newman, 1842** – Philippines (Newman, 1842, Gemminger, Harold, 1873, Aurivillius, 1922, Breuning, 1961a); Mindanao (Breuning, 1965, Breuning, 1980, Hudepohl, 1983, Chemin, Vives, 2017); Luzon (Mt. Banahao) (Heller, 1916).

Subgenus *Trichopraonetha* Breuning, 1961

52. ***Pterolophia albofasciata* Breuning, 1938** – Philippines (Breuning, 1938, 1961a, 1965).

Almost all species of the list above were described and/or registered from the Philippines. Six species have wider distributional ranges and no limited only by the Philippines.

Furthermore, six species have no detailed information about the presence of this taxon on a particular island. In total, at the present stage of our study, species of *Pterolophia* were recorded from 13 islands: Mindanao (18 species, with 10 of which known only from this island), Luzon (17/8), Palawan (6/5), Sibuyan (6/4), Samar (4/2), Leyte (2), Negros (3), Mindoro (2/1), Sibutu, Basilan, Bucas Grande, Marindoque and Cebu (only one species for each island respectively).

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