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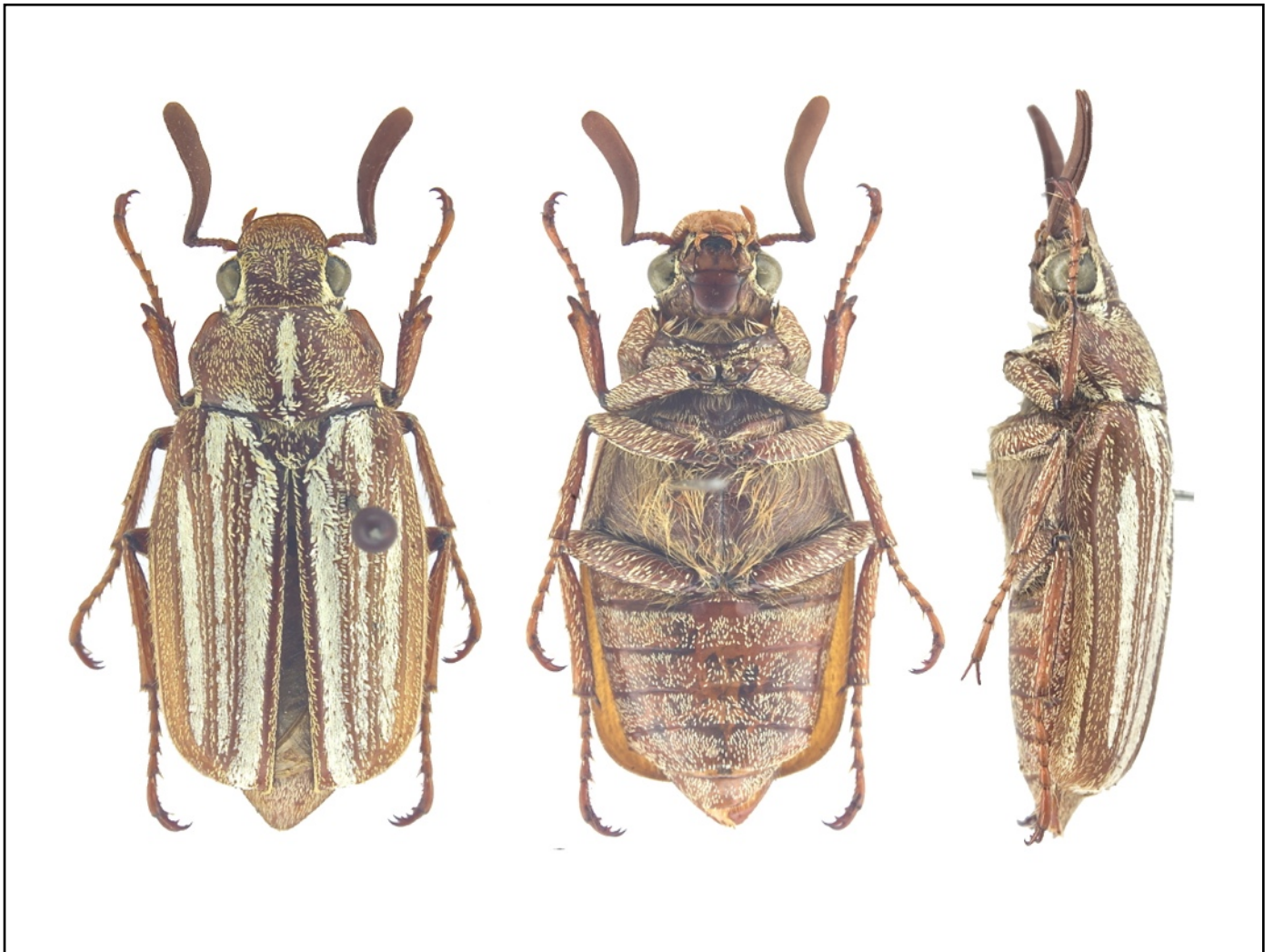
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A new species of the genus *Dedalopteris* Sabatinelli & Pontuale, 1998 from China (Coleoptera, Scarabaeidae, Melolonthinae)

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Coleoptera; description;
Scarabaeidae; new species;
Melolonthinae; illustration;
Leucopholini; female;
Dedalopteris; Yunnan;
xuhaoi; China.
taxonomy;

Abstract. – *Dedalopteris xuhaoi* sp. n. is described from Yunnan province, southwestern China. *Dedalopteris intermedius* (Zhang, 1990) is illustrated and compared with the new species, and its female is noted for the first time. A distribution map is also provided.

Wang F.-L., 2024. – A new species of the genus *Dedalopteris* Sabatinelli & Pontuale, 1998 from China (Coleoptera, Scarabaeidae, Melolonthinae). *Faunitaxys*, 12(18): 1 – 5.

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Introduction

The genus *Dedalopteris* Sabatinelli & Pontuale, 1998 currently comprises 10 valid species distributed in China, India, and Indochina (Bezdek, 2016; Bunalski, 2001; Moser, 1908; Pham *et al.*, 2024; Sabatinelli & Pontuale, 1998; Xu *et al.*, 2008; Zhang, 1990, 2002; Zidek & Krajcik, 2007).

Of China, seven species have been known so far:

- *Dedalopteris fencli* Zidek & Krajcik, 2007 (Guangdong province);
- *D. fujianensis* (Zhang, 1990) (Fujian province);
- *D. intermedius* (Zhang, 1990) (Yunnan province);
- *D. hainanensis* Zhang, 2002 (Hainan province);
- *D. itohi* Sabatinelli & Pontuale, 1998 (Sichuan province);
- *D. melanodiscus* (Zhang, 1990) (Guizhou province);
- *D. signatus* (Moser, 1908) (Yunnan province).

In this paper, I am going to describe a new species of this genus from western Yunnan under the name of *D. xuhaoi*. In addition, a topotype of *Dedalopteris intermedius* (Zhang, 1990) is illustrated for comparison with the new species.

All materials examined in this study are deposited in the Mianyang Normal University, Mianyang, China (MYNU). Data are provided *verbatim* for type specimens, using the following symbols: / = different lines; // = different labels.

Taxonomy

Dedalopteris intermedius (Zhang, 1990) (介雅鳃金龟)

(Fig. 1-3, 7-9, 15-18 & 23)

Material examined, 8 ♂ & 2 ♀ (MYNU): CHINA: Yunnan, Da li, Yunlong County, Caojian Twon, Tiechang, 13-22. V. 2021, Zhi-Wu Zuo leg.

Reviewer :

Denis Keith (France) - <http://zoobank.org/C922B63D-331E-44BF-B386-9A70AE05CA28>

Remarks. – *Dedalopteris intermedius* was originally described by Zhang (1990) in the genus *Malaisius*, and transferred to *Dedalopteris* by Sabatinelli & Pontuale (1998). This species was recorded from Yunlong county (Caojian: alt. 2600 m) in northwestern Yunnan (Zhang, 1990) and Tengchong (Datang, alt. 1850 m) by Xu *et al.* (2008). In this study, several specimens from the type locality (Caojian: alt. 2500 m) were examined and the female is illustrated for the first time. The female exhibits distinct differences from the male as follows (Fig. 1 & 23): body plump, color darker; antennal club shorter; protibia wider, second protibial tooth longer and wider, basal tooth distinct; tarsus generally shorter; apex of mesotibia and metatibia wider. Antennal club slightly shorter than antennomeres 1-7 combined.

***Dedalopteris xuhaoi* sp. n.** (许氏雅丽金龟)

(Fig. 4-6, 10-12 & 19-22)

ZooBank: <https://zoobank.org/E5F48082-676E-48FC-B6EE-4E88A6EE4334>

Holotype, ♂ (MYNU): CHINA: Yunnan / Baoshan, Longling County / Xiangda Town, alt. 1700 m / V-VI.2021, local leg. // HOLOTYPE // *Dedalopteris xuhaoi* / F.-L. Wang det. 2024.

Description of holotype (Fig. 4-6, 10-12 & 19-22)

General appearance. – Body length: 20.1 mm, width: 9.1 mm. Body elongate ovoid, moderately convex in profile (Fig. 6).

Color. – Whole body color brown; head, antenna, posterior margin of pronotum, scutellum, sutural costa, apex of tibiae, joint of legs and claws darker. Body surface with white or grayish yellow oval, imbricating scales and narrow, acicular setae (Fig. 4).

Head (Fig. 10). – Clypeus wide semicircular, 2.67 times as wide as long, anterior margin weakly reflexed; surface with sparse, large punctures, with dense grayish yellow oval, imbricating scales. Frontoclypeal suture complete, slightly concave-forward. Compound eyes comparatively large, interocular distance 0.62 times as wide as the maximum transverse width of head. Frons with an inverted triangular depression from frontoclypeal suture to disc, surface rather sparsely



punctate, also with grayish yellow oval, imbricating scales, denser on the middle longitudinal area, rather dense around eyes, on the anterior half grayish yellow, on the posterior half white. Antenna with 10 antennomeres, antennal club composed of 3 antennomeres, 2.8 times longer than antennomeres 1–7 combined. The last joint of maxillar palpi expanded.

Pronotum (Fig. 11). – Wide trapezoid, margins without marginal line. Lateral margin convergent in the middle, slightly flat, anterior half straight, posterior half incurved. Anterior margin deeply depressed before anterior angles. Anterior angles widely rounded, slightly flat; posterior angles acute, slightly prolonged, apex sharp. Surface sparsely, shallowly punctate; with dense white oval, imbricating scales on the middle longitudinal area; with white oval, imbricating scales on posterior margin between scutellum and posterior angle, also with same scales on the depressed area of the anterior margin near the anterior angles; with dense, overlapped smaller, narrow, acicular yellow scales on the area around posterior angles; disc sparsely with grayish yellow oval, imbricating scales; sparsely with yellow setae on the anterior area of side.

Scutellum. – Apex corner rounded, with several white or yellow narrow scales; disc sparsely with grayish yellow oval, imbricating scales.

Elytra (Fig. 4). – With five principal costae and five wide principal intervals, principal costae II and III composed of three narrow secondary costae and two narrow secondary intervals. Vestiture of principal interval I–III composed of dense white oval, imbricating scales, principal interval VI sparsely with smaller yellow oval, imbricating scales, principal interval V densely with longer yellow setae, and yellow oval, imbricating scales near costa 5 (Fig. 14). White scales on principal interval I reaching the anterior margin and posterior angles, on principal interval II reaching the anterior margin but truncated before the lateral margin, and on principal interval III starting from humeral umbones and truncated before the lateral margin. Two narrow secondary intervals on principal costae II and III with white or yellow oval, imbricating scales.

Pygidium (Fig. 12). – Weakly convex in profile, surface with dense grayish yellow acicular setae.

Abdominal ventrites (Fig. 5). – With moderately dense grayish yellow oval, imbricating scales, sparser on the middle.

Legs. – Protibia tridentate, terminal tooth slightly prolonged, basal tooth extremely weak; apex of mesotibia and metatibia slightly widened, surface with sparse grayish yellow oval, imbricating scales. Tarsi slender and long.

Genitalia. – As in Fig. 19–22.

Differential diagnosis. – Depending on the shape of male genitalia (Bunalski, 2001; Pham *et al.*, 2024; Sabatinelli & Pontuale, 1998; Zhang, 1990, 2002; Zidek & Krajčik, 2007), *Dedalopteris xuhaoi* sp. n. (type-locality: Xiangda town) is closely similar to *D. intermedius* (type-locality: Caojian town, about 200 km from Xiangda county).

We can distinguish *D. xuhaoi* sp. n. from *D. intermedius* by:

1 - clypeus and frons with large, oval, imbricating scales, the last joint of maxillar palpi expanded (Fig. 2, 5, 7 & 10; clypeus and frons with narrow, acicular setae, the last joint of maxillar palpi elongate in *D. intermedius*);

2 - disc of pronotum with large, oval, imbricating scales (Fig. 8 & 11; disc of pronotum with narrow, acicular setae in *D. intermedius*);

3 - apex of pygidium broadly rounded, surface with dense scales (Fig. 9 & 12; apex of pygidium thinly rounded, surface with moderately dense setae in *D. intermedius*);

4 - scutellum with oval, imbricating scales (Fig. 1 & 4; with narrow, acicular setae in *D. intermedius*);

5 - principal interval V of elytra both with white oval, imbricating scales and yellow narrow, acicular setae (Fig. 13 & 14; only with yellow narrow, acicular setae in *D. intermedius*);

6 - basal part of left parameres narrower, apex part becoming widened distinctly (Fig. 17 & 21; left parameres almost parallel, only slightly widened at apex in *D. intermedius*).

Etymology. – The new species is named after my friend Dr. Hao Xu (MYNU), who provided valuable taxonomic articles for this study.

Distribution. – Xiangda town, Longling county, western Yunnan, China (Fig. 24).

Acknowledgments

I am grateful to Dr. Hao Xu (MYNU) for sharing taxonomic articles of the genus *Dedalopteris*.

References

- Bezděk A., 2016. – Tribe Leucopholini Burmeister, 1855. In: Löbl, I. & Löbl, D. (Eds.), *Catalogue of Palaearctic Coleoptera. Volume 3. Scarabaeoidea-Scirtoidea-Dascilloidea-Buprestoidea-Byrrhoidea*. Revised and Updated Edition. Brill, Stenstrup, pp. 224–226.
- Bunalski M., 2001. – A new species of the genus *Dedalopteris* (Col. Melolonthidae) from Vietnam. *Polish Journal of Entomology*, 70: 247–251.
- Li C.-L. & Yang P.-S., 1999. – Revision of the genus *Malaisius* Arrow (Coleoptera: Scarabaeidae: Melolonthinae). *The Canadian Entomologist*, 131 (2): 187–202. DOI: 10.4039/Ent131187-2
- Moser J., 1908. – Neue Melolonthiden und Cetoniden. *Annales de la Société Entomologique de Belgique*, 52 (12): 353–367. DOI: 10.5962/bhl.part.5014
- Pham P., Ahrens D. & Sabatinelli G., 2024. – The genus *Dedalopteris* Sabatinelli & Pontuale, 1998 (Scarabaeidae: Melolonthinae: Leucopholini) in Laos and Vietnam, with description of a new species. *Zootaxa*, 5406 (1): 141–152. DOI: 10.11646/zootaxa.5406.1.7
- Sabatinelli G. & Pontuale G., 1998. – Description of the genus *Dedalopteris* and notes on genus *Malaisius* Arrow and *Cyphochilus* Waterhouse (Col. Scarabaeoidea, Melolonthinae). *Lambillionea*, 97 (1): 60–76.
- Xu W., Li H.-L., Huang H. & Li L.-Z., 2008. – On the generic classification of the genera *Malaisius* and *Dedalopteris* with the discovery of new localities for three Chinese species (Coleoptera: Melolonthidae). *Journal of Shanghai Normal University* (Natural Sciences), 37 (5): 519–522. [in Chinese, with English abstract]
- Zhang Y.-W., 1990. – Notes on the genus *Malaisius* Arrow with four new species from China (Col. Melolonthinae). *Acta Zootaxonomica Sinica*, 15 (2): 188–195. [in Chinese, with English description of new species]
- Zhang Y.-W., 2002. – Coleoptera: Scarabaeoidea. In: Huang, F.S. (Ed.), *Forest Insects of Hainan*. Science Press, Beijing, pp. 327–336. [in Chinese, with English description of new species]
- Zidek J. & Krajčik M., 2007. – Remarks on the genus *Dedalopteris* (Melolonthinae: Leucopholini), with descriptions of two new species. *Animma*, x, 21: 1–14.

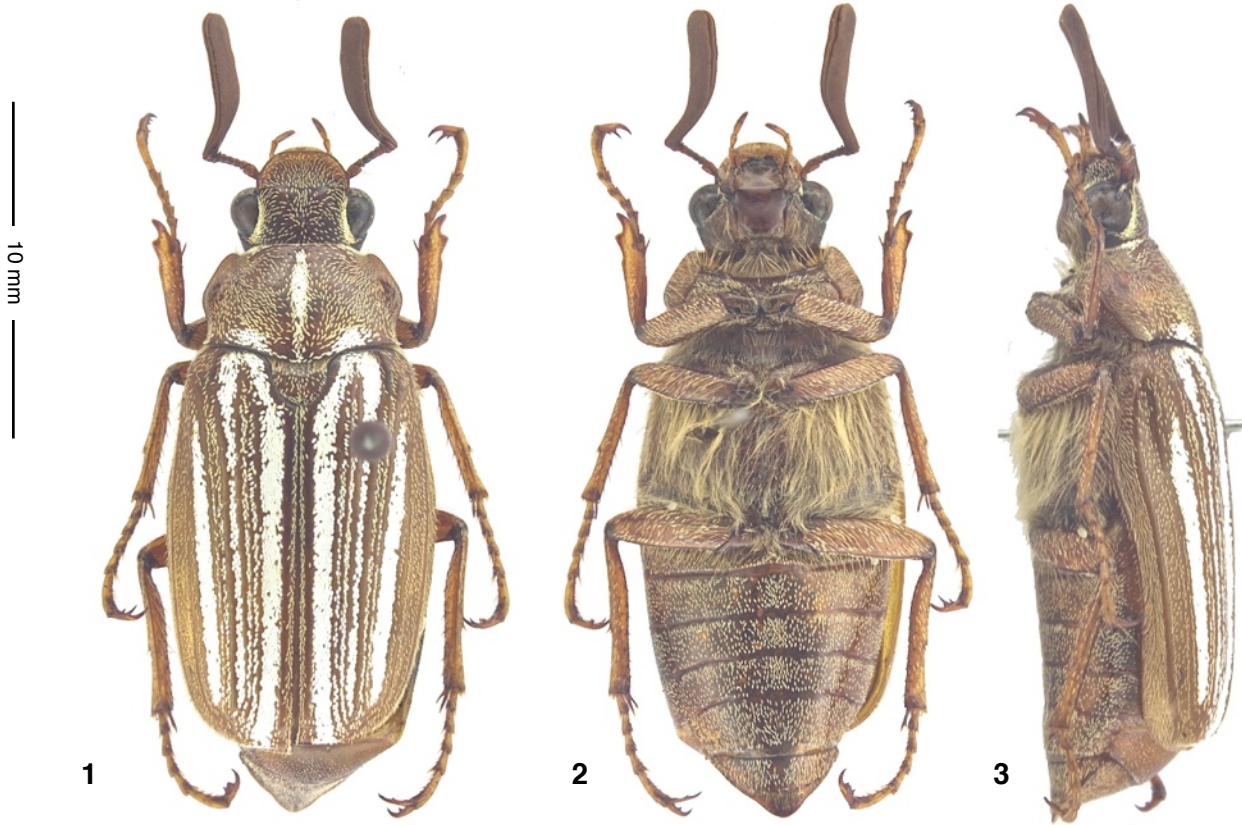


Fig. 1-3. *Dedalopterus intermedius* (Zhang, 1990) ♂, from type locality.

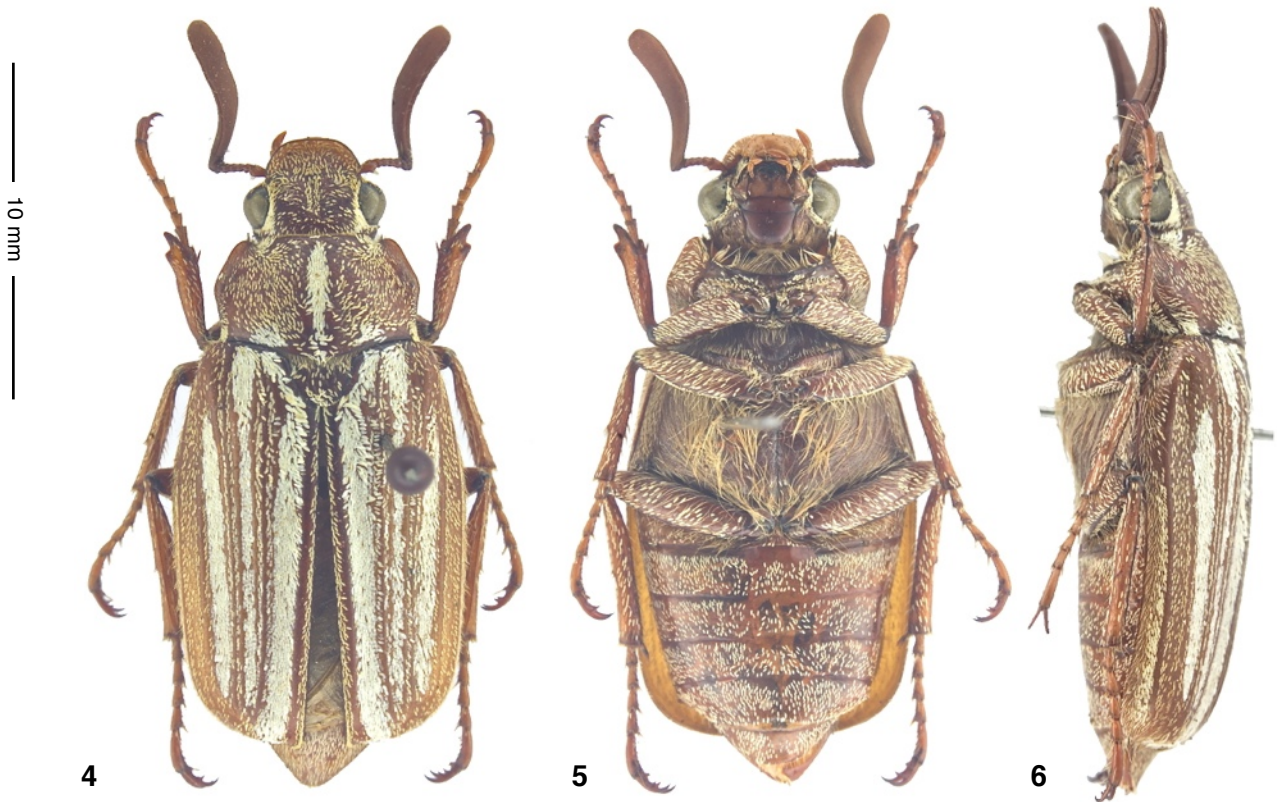


Fig. 4-6. *Dedalopterus xuhaoi* sp. n., ♂ holotype.

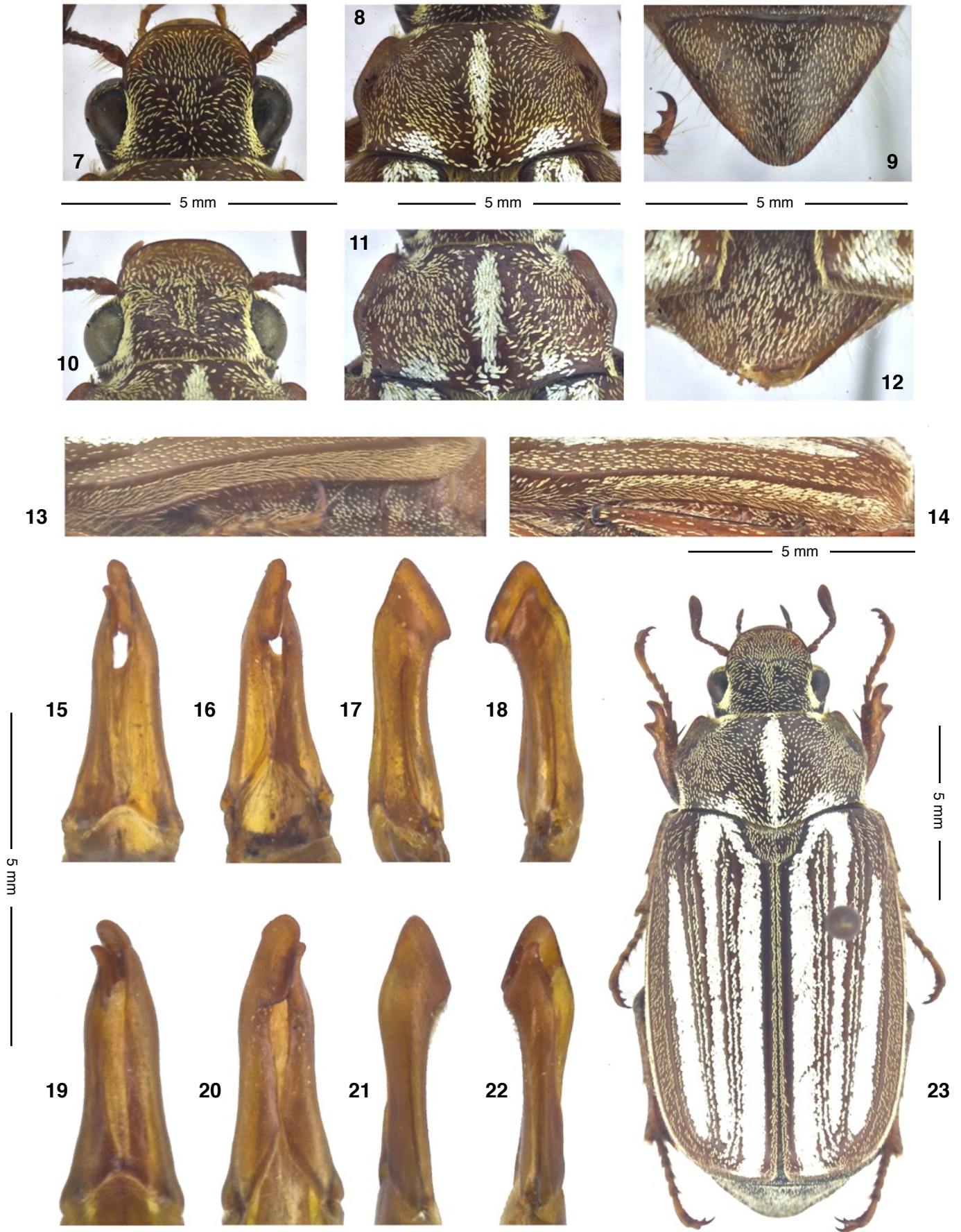


Fig. 7-23. *Dedalopteris* spp.

7-9, 13 & 15-18. *Dedalopteris intermedius* (Zhang, 1990), ♂.

10-12, 14 & 19-22. *Dedalopteris xuhaoi* sp. n., ♂ holotype.

23. *Dedalopteris intermedius* (Zhang, 1990), ♀.

7, 10. Head. 8, 11. Pronotum. 9, 12. Pygidium. 13, 14. Lateral interval of elytra. 15-22. Parameres. 23. Habitus. 15, 19. Dorsal view. 16, 20. Ventral view. 17, 21. Lateral view from left. 18, 22. Lateral view from right.

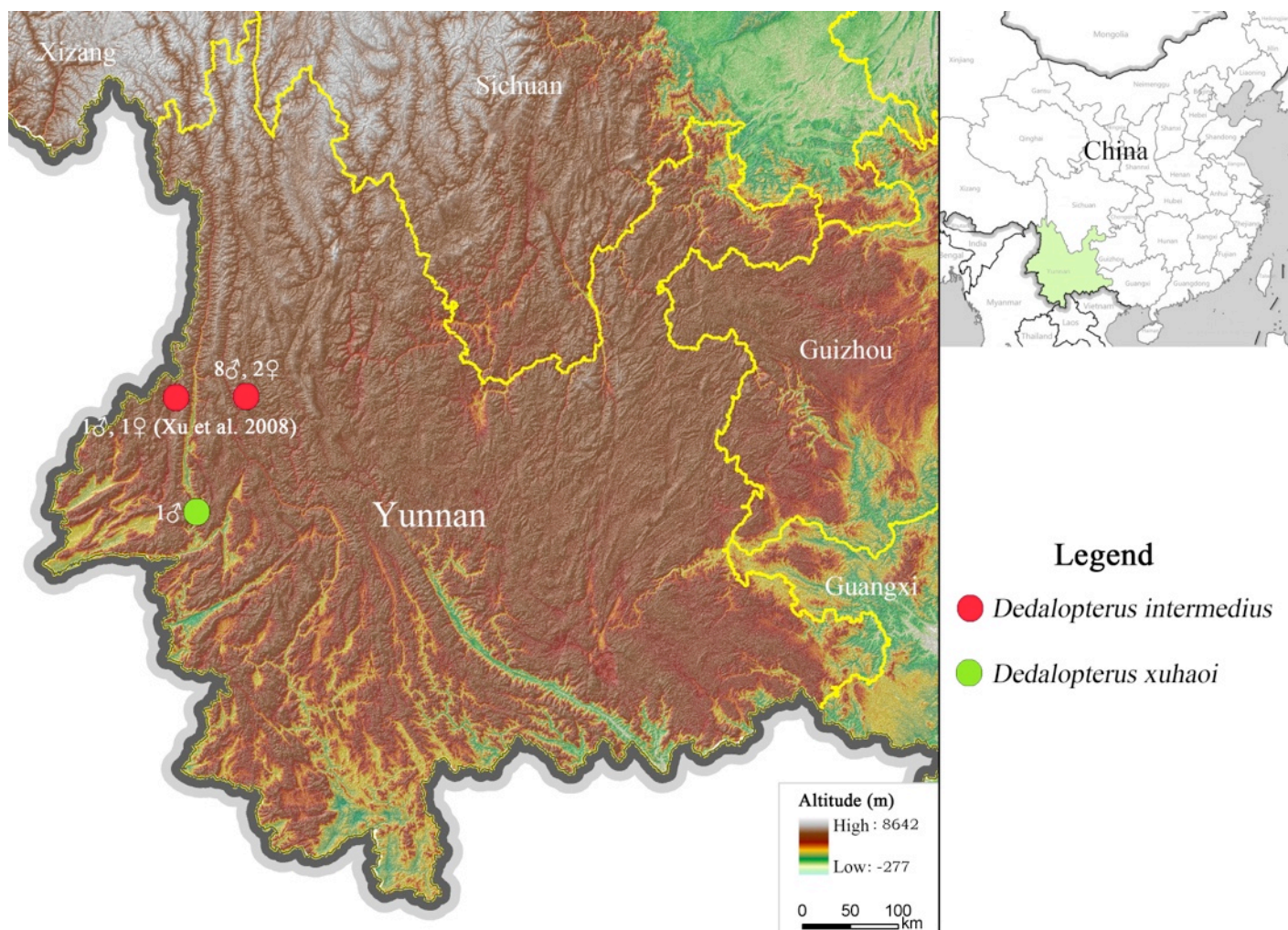


Fig. 24. Distribution map of *Dedalopterus intermedius* (Zhang, 1990) and *Dedalopterus xuhaoi* sp. n.

Résumé

Wang F.-L., 2024. – Une nouvelle espèce du genre *Dedalopterus* Sabatinelli & Pontuale, 1998 de Chine (Coleoptera, Scarabaeidae, Melolonthinae). *Faunitaxys*, 12(18): 1 – 5.

Dedalopterus xuhaoi sp. n. est décrite de la province du Yunnan, sud-ouest de la Chine. *Dedalopterus intermedius* (Zhang, 1990) est illustrée et comparée à la nouvelle espèce, et la femelle est présentée pour la première fois. Une carte de répartition est fournie.

Mots-clés. – Coleoptera, Scarabaeidae, Melolonthinae, Leucopholini, *Dedalopterus*, *xuhaoi*, taxonomie, description, espèce nouvelle, illustration, femelle, Yunnan, Chine.

Derniers articles publiés

Lourenço W. R. & Velten J., 2024. – An exceptional new genus of fossil scorpion from Burmese Cretaceous amber belonging to the family Palaeoburmesebuthidae Lourenço, 2015. *Faunitaxys*, 12(13): 1 – 7. [https://doi.org/10.57800/faunitaxys-12\(13\)](https://doi.org/10.57800/faunitaxys-12(13))

Gouverneur X. & Guérard P., 2024. – Description d'une nouvelle espèce du genre *Stenhomalus* White, 1855 du Laos (Coleoptera, Cerambycidae, O브리ini). *Faunitaxys*, 12(14): 1 – 3. [https://doi.org/10.57800/faunitaxys-12\(14\)](https://doi.org/10.57800/faunitaxys-12(14))

Gouverneur X., 2024. – Description d'une nouvelle espèce du genre *Margites* Gahan, 1891 du Laos (Coleoptera, Cerambycidae, Cerambycini). *Faunitaxys*, 12(15): 1 – 3. [https://doi.org/10.57800/faunitaxys-12\(15\)](https://doi.org/10.57800/faunitaxys-12(15))

Gouverneur X., 2024. – Description d'une nouvelle espèce du genre *Glenida* Gahan, 1888 (Coleoptera : Cerambycidae) du Vietnam. *Faunitaxys*, 12(16): 1 – 7. [https://doi.org/10.57800/faunitaxys-12\(16\)](https://doi.org/10.57800/faunitaxys-12(16))

Gerstmeier R., 2024. – *Phloiocopus bimaculatus* sp. n., a new apterous species from Somalia (Coleoptera, Cleridae, Clerinae). *Faunitaxys*, 12(17): 1 – 3. [https://doi.org/10.57800/faunitaxys-12\(17\)](https://doi.org/10.57800/faunitaxys-12(17))

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Illustration de la couverture :

Dedalopterus xuhaoi sp. n., holotype.

Crédits:

Fa-Lei Wang : Fig. 1-24 & couverture.