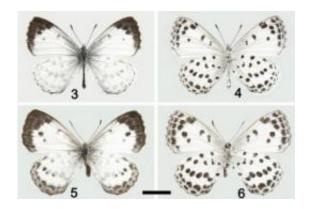


Chinese-German collaboration yields new species of Large Blue butterfly

June 9 2010



This is *Phengaris xiushani*, "Xiushan's Large Blue," the newly discovered species (3: male upper side, 4: under side; 5: female upper side, 6: under side). Credit: Prof. Min Wang/South China Agricultural University, Guangzhou

Chinese and German scientists have found a new butterfly species in the south of China. It is the first known species of the family of Large Blue butterflies which lives in mountain forests.

The new species from northwestern Yunnan was discovered by Prof. Min Wang of the South China Agricultural University, Guangzhou, China and Dr. Josef Settele of the Helmholtz Centre for Environmental Research (UFZ), Halle, Germany. The species was described in the open access journal *Zoo Keys* and was named *Phengaris xiushani*. With the name the scientist Dr. Xiushan Li is honored, who has rendered outstanding service to the cooperation of the butterfly researchers in



Germany and China.

The large blues belong to the most intensively studied group of butterflies in Eurasia, which is probably due to their "obscure" biology and ecology: On the one hand they depend on specific food plants, which in itself is not yet that surprising. But they also require particular ant species as many of the known species feed on ants during most of their life as caterpillars. These specialized habitat requirements have made them vulnerable to climate change and habitat alteration.

The discovery of the new species now was quite surprising, although contrary to the European species (which are well known under their scientific name Maculinea) the Chinese species, which include both the Maculinea and the Phengaris blues, are not so well studied and monitored due to lack of financial and personnel resources. Consequently, nothing is known on the ecology of this new species, with the exception that it lives in undisturbed forested mountains, where it was discovered - which makes it different from the other Large Blues which over the entire range of distribution live in grasslands.

The discovery was made in the course of a Chinese-German workshop on butterfly conservation held in Guangzhou in December 2009.

Reference specimens (the so-called types) are kept in the Insect Collection of the South China Agricultural University, Guangzhou, China, and the "Senckenberg Museum für Tierkunde" in Dresden, Germany.

The name given to the new species refers: (a) to the beautiful mountain on the slopes of which it was found (Xiu-Shan in Chinese means "beautiful mountain"), and (b) more importantly we dedicate this species to Dr. Xiushan Li who worked at UFZ for some years, who brought the two authors of this description together, and who has committed much



of his life to research on ecology and conservation of <u>butterflies</u> - with his most recent publication in 2010.

More information: Publications:

- -- Min Wang, Josef Settele (2010): Notes on and key to the genus Phengaris (s. str.) (Lepidoptera: Lycaenidae) from mainland China with description of a new species. ZooKeys. Volume 48, pp. 21-28; <a href="https://doi.org/
- -- Xiu-shan Li, You-qing Luo, Ya-lin Zhang, Oliver Schweiger, Josef Settele and Qing-sen Yang (2010). On the conservation biology of a Chinese population of the birdwing Troides aeacus (Lepidoptera: Papilionidae). Journal of Insect Conservation. dx.doi.org/10.1007/s10841-009-9254-x

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