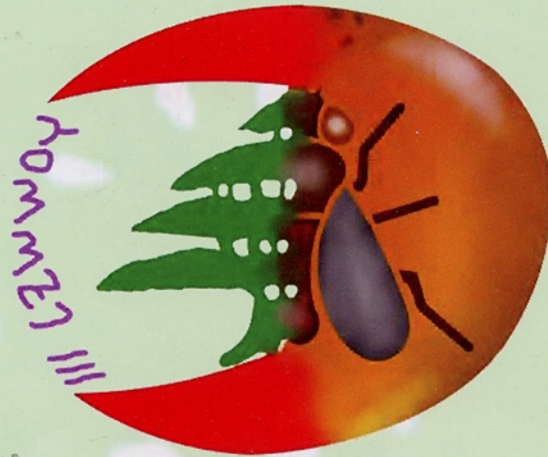


# The 6<sup>th</sup> International Congress on Fossil Insects, Arthropods and Amber

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6<sup>th</sup> International Congress  
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## ABSTRACT BOOK

## Current State of Knowledge of the Mesozoic Neuroptera of China

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The order Neuroptera is known in the fossil record since the Early Permian (about 280 to 260 Ma) and it thrives ever since. The neuropterans occur relatively rare in the pre-Mesozoic localities. The order was most diverse in the Mesozoic. Most of the extinct and extant groups have been present at this time. Many families, genera and species of the Chinese neuropteran fossils have been published since the order was first reported by Ping Chi in 1928. Up to now, 20 families have been recorded from the Mesozoic of China, and 58 genera and 97 species have been described from this era.

We mainly study the fossils materials from two localities of northeast China: the Middle Jurassic Daohugou (Jiulongshan Formation) in Inner Mongolia, and the Early Eocene Huangbanjigou (Yixian Formation) in Liaoning Province.

The Daohugou beds contain a diverse insect fauna, with 19 insect orders being represented. We have examined approximately 4000 Neuroptera specimens which are housed in the Capital Normal University. Hitherto, only 58 species (29 genera) belonging to 11 families were described. Osmylidae are most abundant and diverse among neuropterans in the assemblage. Chrysopidae, Grammolingiidae, Saucrosmylidae, Ithonidae, Kalligrammatidae, Psychopsidae, Osmylopsychopidae and Parakseneuridae are common. Aetheogrammatidae, Berothidae, Mantispidae, Panfiloviidae, Nymphidae, Brongiartiellidae, and Mesochrysopidae are rare.

The fossils from Huangbanjigou are mostly beautifully preserved, and represent a wide variety of animal and plant taxa. The insect fossils are also numerous and diverse. There are more than 200 neuropteran specimens housed in the Capital Normal University. Up to date, 25 named neuropteran species (19 genera) belonging to 11 families have been recorded: Aetheogrammatidae, Ascalochrysidae, Berothidae, Chrysopidae, Dipteromantispidae, Ithonidae, Kalligrammatidae, Mesochrysopidae, Myrmeleontidae, Palaeoleontidae, and Psychopsidae. Undescribed material belongs to the families Mantispidae, Osmylidae, and Nymphidae. The families Chrysopidae and Ithonidae (undescribed yet) are most common in the assemblage.

These valuable materials give us a great opportunity to study biodiversity and ecology of the Mesozoic Neuroptera.