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Whiteflies (Hemiptera: Aleyrodidae) of the Eocene succinite – hidden diversity, unknown disparity [P]

DROHOJOWSKA J. (1) & SZWEDO J. (2)

(1) Institute of Biology, Biotechnology and Environmental Protection, Faculty of Natural Sciences, University of Silesia, Katowice, Poland; (2) Laboratory of Evolutionary Entomology and Museum of Amber Inclusions, Department of Invertebrate Zoology and Parasitology, Faculty of Biology, University of Gdańsk, Poland

Baltic amber is a collective name of fossil resins deposited in various parts of Europe: Gulf of Gdańsk area, Saxony and Lusatia in Germany, Latvia, Lithuania, Belorussia, Ukraine, Denmark, United Kingdom. The most prolific in inclusions is a resin named succinite, which is covering the vast majority of fossil resins from the above-mentioned deposits. However, this type of resin is to be found also far in the north, in Spitsbergen and Canadian Arctic. Presence of fossil resins, distributed and deposited in various places and under various conditions, probably originated in different times and palaeohabitats need a new look at inclusions enclosed in amber. Whiteflies (Sternorrhyncha: Aleyrodidae) are named due to the presence of powdery secretion preened over the bodies and wings of the adults of almost all species. Their fossil record reaches back to the Late Jurassic. Most of the fossils known come from resins, including the first fossil described by Menge in 1856, under the name 'Aleyrodes' aculeatus from the Eocene Baltic amber. The number of fossils known from this resin is now counted as five, representing both subfamilies Aleyrodinae and Aleurodicinae. But these known, cover only a very small fraction of their real taxonomic diversity, presenting only a part of morphological disparity. Amber preserved whiteflies have been often overlooked or ignored, being preserved as imagines and difficult to compare with the recent ones, of which disparity is weakly elaborated. On the other hand, these inclusions present very important part of the fossil record, providing a lot of new data, not only on taxonomy or morphology, but also information of importance for palaeoecosystems and palaeohabitat reconstructions, paleoclimates, and evolutionary traits. New and rich in whiteflies inclusions samples of amber from Denmark, Germany, Ukraine, and the Gulf of Gdańsk present a lot of new genera and species to be described. These fossils present also a high morphological disparity and their distribution can give a better understanding of the palaeobiogeographic and palaeoenvironmental differentiation of Europe during the Eocene. Whiteflies could be good indicators for local faunas on one hand, on the other, could be helpful for the understanding of taphonomy, transportation, and deposition of amber.

Study on population genetics of invasive pest *Stictocephala bisonia* (Hemiptera: Membracidae: Smiliinae) [P]

FENG L.-N. (1), YU R.-T. (1), FENG Y. (1), DIETRICH C. H. (2) & YUAN X.-Q. (1,*)

(1) College of Plant Protection, Northwest A&F University, Yangling, Shaanxi, China; (2) Illinois Natural History Survey, Prairie Research Institute, University of Illinois, Urbana-Champaign, USA; (*) corresponding author

Stictocephala bisonia Kopp & Yonke, 1977 is native to the United States of America; it was introduced to Hungary in 1912. Since then, it has spread in Europe, North Africa and other regions. In 2017, *S. bisonia* was first discovered in Taibai County, Shaanxi Province, and in 2019 it was found in parts of Xinjiang Uyghur Autonomous Region. *Stictocephala bisonia* is a potential economic pest that feeds on 60 species of plants from 16 families, especially economic