Short communication

A new method for photography of insect fossils

Christine DAHL

Since last year a commercial photoapparatus, Dynaphot (trademark), is available for photography of, among other items, fresh insect fossil material. The apparatus is based on the principle of "Light Scanning Photography", a recently developed method for microphotography with demands on high resolution of three-dimensional objects with high focal depth. It uses a laser beam going over the fossil within the certain time span and from a defined angle. This gives a good in-depth picture. The optimal magnification range depends on the correlation between exposure time and the dimensions of the laser beam slits. Photographs can be made in black and white or colour, depending on the camera set up.

I had the opportunity to get help at the Kungliga Tekniska Högskolan, Stockholm to exploit the method on one of the first scientific prototypes for this method. The method was applied on a fossil which is preserved in relief on the substrate. Under the special circumstances with the insect fossil laying flat on a rather coarse sandstone, magnification was limited to abt. 20 times with a very good result. The main advantage was the easy handling of the fossil. It was not necessary to use optical oils or ethanol for improving the resolution. For whole images of fragile insect fossils this method is to recommend.

Section of Entomology, Department of Zoology, Box 561, S-751 22 Uppsala, Sweden

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