A FORGOTTEN, BUT VERY EFFECTIVE, METHOD FOR CLEANINGINSECTS OF SOIL AND DEBRIS

Zbysek Sustek
Institute of Experimental Biology and Ecology
Slovak Academy of Sciences
Obranov mieru 3
814 34 Bratislava, CZECHOSLOVAKIA

Many richly sculptured beetles, like Trogidae or many Tenebrionidae, are frequently covered with a firm crust of soil, plant parts or other debris. Cleaning these types of specimens is not always easy because of danger to the specimens, especially those covered with pubescence or white waxy deposits (as in some Tenebrionidae). A method for cleaning these types of specimens can be found in Reichardt's (1936) paper on the Palaearctic Opatrini (which incidentally contains a still-useful key to this group).

At first glance this method appears rather drastic, but it is in fact very easy and affective. Soiled beetles are placed into a hot 10% solution of kalium hydroxide (KOH) for 10 to 20 seconds; or, drops of the solution can be placed on soiled areas (elytra, pronotum, mouthparts, etc.) with a pipette or brush. In a surprisingly short amount of time the crusted deposits are destroyed and sand particles fall into the solution, even from specimens with the densest pubescence. Any remaining depsoits can usually be loosened or removed with a fine, soft brush. The remaining KOH solution on the specimen can be neutralized with a 30% solution of acetic acid, and then removed by washing with clean water.

IMPORTANT NOTE!! The KOH solution must be heated in a water bath by placing the KOH container in a larger container of water. The container with the KOH must never come in direct contact with a heat source or flame. In all cases it is advisable to protect your hands and face with suitable protective gear. However, with these few precautions the method is entirely safe, rapid and effective.

REFERENCES

Reichardt, A.N. 1936 Zhuki-chernotelki triby Opatrini palaearkticheskoi oblasti (The black beetles of the tribe Opatrini of the palaearctic region). Opredeliti po faune SSSR, tome 19, Izd. Akad. Nauk SSSR, Moskva-Leningrad, 224p.