

# INFLUENCE OF PITFALL TRAPS AND WB PROBE II TRAPS ON THE CAPTURE OF FOUR STORED-GRAIN COLEOPTERA

Pasquale TREMATERRA and Massimo MANCINI

*Department S.A.V.A., University of Molise, Via Cavour 50, I-86100  
Campobasso Italy.  
Fax: 087498743*

Two commercially available traps, Pitfall Trap and WB Probe II Trap, were used in the laboratory to monitor insects in grain (*Triticum aestivum*) at a temperature of 22-24°C and relative humidity of 65±5%. The major coleopteran pests of cereals in Italy: *Oryzaephilus surinamensis* (L.), *Rhyzopertha dominica* (F.), *Sitophilus oryzae* (L.) and *Tribolium castaneum* (Herbst) were added to the grain at 0.9 insect/kg. Trapping revealed significant differences in the numbers of insects collected by the two types of trap. Also, the numbers of individuals of the different species captured differed significantly when compared across trap and treatment types.

The Pitfall Trap, located on the surface and within the grain bulk (15 cm below the surface), indicated by trap capture that *T. castaneum* migrated in numbers to the surface, whilst *O. surinamensis* remained within the bulk.

The WB Probe II Trap trapped more *T. castaneum* than *O. surinamensis*. The species that were trapped in fewer numbers were *R. dominica* and *S. oryzae*.