XX INTERNATIONAL CONGRESS OF ENTOMOLOGY

PROCEEDINGS

Firenze, Italy
August 25-31, 1996
ISOLATION OF PATHOGENIC BACTERIA FROM **ALPHITOBIIUS DIAPERINUS** (PANZER) (COLEOPTERA: TENEBRIONIDAE), A PEST OF POULTRY HOUSES.

M. Principato, V. Cuteri

Istituto di Parassitologia, Facoltà di Medicina Veterinaria, Perugia, Italy
1 Istituto di Malattie Infettive, Facoltà di Medicina Veterinaria, Perugia, Italy.

**Alphitobius diaperinus** is a darkling beetle, recently recorded by us in Italy for the damages caused by its larvae to poultry house insulation. Moreover, the larvae can harbour various pathogens of poultry and since they are found in a very great number in litters, that is a serious hygienical problem above all in broiler houses. In order to verify the pathogenic role of these beetles, we have effected four samplings (at about 15 days' intervals) of larvae and adults in an Umbrian broiler house massively infested. The insects were dipped in 1% formaldehyde for 1 minute and were dissected, in sterility conditions, to extract their content. This was cultured in Trypticase Soy Broth (BBL) at 37°C for 12 hours. Afterwards, cultures in Trypticase Soy Agar and Trypticase Soy Agar with addition of sheep defibrinated blood (5%) and Mac Conkey Agar (BBL) were made. The bacteria so developed were identified by biochemical and serological tests. *Enterobacter cloacae* was always isolated from larvae, whereas from adults *Streptococcus dysgalactiae* was isolated twice. *Staphylococcus intermedius* was isolated once and once the sampling turned out to be sterile. *E. cloacae* is a microorganism frequently isolated either from human or avian intestine, but it is not considered to be enteropathogenic. On the contrary, *S. dysgalactiae* and *S. intermedius* can cause pneumonia, conjunctivitis, otitis and urogenital infections to poultry.