

## The Turkish Journal of Occupational / Environmental Medicine and Safety

Vol:1, Issue Supplement 1 Web: <u>http://www.turjoem.com</u> ISSN : 2149-4711 Poster Presentation

## P100. ACUTE TOXIC EFFECTS OF DELTAMETHRIN ON NARROW CLAWED CRAYFISH (AstacusleptodactylusEsch. 1823)

Çağlan Karasu BENLİ<sup>1</sup>\*, Göktuğ GÜL<sup>2</sup>

<sup>1</sup>Gazi University, Instituteof Natural and Applied Sciences, Department of Environmental Sciences, Ankara, TÜRKİYE <sup>2</sup>Gazi Üniversitesi, Health Services Vocational School, Department of Environmental Health, Ankara, TÜRKİYE \*benli@gazi.edu.tr

In the present study, deltamethrin, a synthetic pyrethroid, contaminating aquatic ecosystems, will be investigated for determination of acute toxic efffects on narrow clawed cray fish (*Astacusleptodactylus*Esch. 1823). Crayfish of  $24.16 \pm 4.12$  g mean weight and  $10.28 \pm 0.76$  cm mean length were selected for the bioassay experiments. The experiments were repeated three times, in 10 L tap water. Water temperature was  $21 \pm 1$  °C. The data obtained were statistically evaluated by the use of the E.P.A computer program based on Finney's probit analysis method and the 48 and 72 h LC50 values for crayfish was calculated to be 0.326 (0.149-0.683) and 0.269 (0.121-0.636) µg/L, respectively in semi static bioassay test system. Behavioral changes of crayfish were recorded for all concentrations. In conclusion, deltamethrin is very highly toxic to crayfish, a non-target organism in the ecosystem.