

Trypsin modulating oostatic factor (TMOF) decreased the survival, growth and digestion enzymes of *Macrobrachium rosenbergii* but caused no damage to the hepatopancreas

ABSTRACT

Trypsin-modulating oostatic factor (TMOF) is an effective mosquito larvicide, but information on its potential toxicity to non-target organisms is limited. To investigate this, triplicate groups of 10 *Macrobrachium rosenbergii* were exposed to 0, 10, 50 or 100 mg/L nominal TMOF concentrations for 12 days. Tail moisture, crude protein, and hepatopancreatic glycogen/histopathology were unaffected, but increasing TMOF linearly decreased survival and growth. TMOF at the lowest concentration employed significantly decreased trypsin and chymotrypsin activities.

Keyword: Trypsin; Chymotrypsin; Glycogen; Hepatopancreas; TMOF; Pesticide