

**The Acute Toxic Effect of Glyphosate-Based Herbicide on *Melanopsis praemorsa***Birgöl OTLUDİL<sup>1</sup>, Feysel ÇAKMAK<sup>1</sup>, A. İsmail ÖZKAN<sup>1</sup>, Özlem DEMİRCİ<sup>1</sup><sup>1</sup>Department of Biology, Dicle University, Turkey  
ozdem22@gmail.com

**Aim of the study:** In this research, the aim is to determine 24, 48, 72 and 96-hours acute toxic effect of glyphosate-based herbicide on *Melanopsis praemorsa*.

**Material and Methods:** *M. praemorsa* is an organ in the "Red List of Threatened Species" of the International Union for Conservation of Nature. *M. praemorsa* samples were exposed to ten concentrations in the range of 0,1-1968.3 mg/l of a commercial formulation of glyphosate for 24, 48, 72 and 96-hours. We analyzed the results by probit analysis.

**Results:** In this work, the effects of different concentrations of glyphosate-based herbicide on *Melanopsis praemorsa* were tested. The LC50 values of glyphosate were determined for 24, 48, 72 and 96-hours as 21.762, 12.641, 10.583 and 9.338 mg/l respectively.

**Acknowledgements:** We are thankful to Prof. Dr. Rıdvan Şeşen for their contributions to our study.

**Keywords:** Acute toxicity, Glyphosate, *Melanopsis praemorsa*