## Regression models for zero-inflated counts: An application on the stem bug in flood-irrigated rice in southern Brazil

Enio Júnior Seidel<sup>1</sup>, Vera Lucia Damasceno Tomazella<sup>2</sup>, Juliano de Bastos Pazini<sup>3</sup>, Afrânio Márcio Corrêa Vieira<sup>4</sup>

**Abstract**: The objective of this work is to use regression models to analyze the count of the stem bug in rice irrigated by flood. The zero-inflated negative binomial model was the one that best described the stem bug count as a function of the time of implantation of the crop.

**Keywords**: GAMLSS models; Count of Tibraca limbativentris; Excess of zeros.

UFSM e UFSCar. email: enioseidel@gmail.com.

<sup>&</sup>lt;sup>2</sup> UFSCar. email: *vera@ufscar.br*.

<sup>&</sup>lt;sup>3</sup> UFPel. email: julianopazzini@hotmail.com.

<sup>4</sup> UFSCar. email: afranio@ufscar.br.