

IMPACT OF CLIMATE CHANGE AND ASSOCIATED ABIOTIC STRESSES ON RICE YIELD

¹CUADRA, S. V.

Rice is one of the main Brazilian crops, having a stable production over the past two decades - from 10 to 13 million tons per year. In Brazil, the main crop yield variations are associated with climatic oscillations, therefore the application of crop growth models to understanding and predicting the impacts of climate variability on crop yield is one of the most important strategies to achieve a positive performance of the sector, in particular, in face of climate change.

In my presentation, the preliminary results of the application of crop growth models, ORYZA2000 and CERES-Rice models, in assessing the impacts of abiotic stresses associated with climate fluctuations in rice (*Oryza sativa* L.) are presented; as well as evaluating the impacts of climate change on rice yield in the Rio Grande do Sul state, Brazil's major producing state.

¹ National Temperate Agriculture Research Centre, Pelotas, RS 96010-971, Brazil. E-mail: santiago.cuadra@embrapa.br