

**Aplicação de diferentes escalas temporais do índice padronizado de precipitação (SPI)
na estimativa**

da variabilidade da produtividade do arroz de terras altas

Diego Simões Fernandes⁽¹⁾, Alexandre Bryan Heinemann⁽¹⁾, Luís Fernando Stone^(1*)
⁽¹⁾Embrapa Arroz e Feijão, Rodovia GO 462, km 12, Zona Rural, CEP 75.375-000, Santo
Antônio de Goiás,

GO, Email: diegosifer@cnpaf.embrapa.br, alexbh@cnpaf.embrapa.br,
stone@cnpaf.embrapa.br
autor para correspondência

Abstract

This study aimed to evaluate the Standardized Precipitation Index (SPI) at different time scales (monthly, quarterly, semiannual and annual) on the occurrence of drought events and their effects on upland rice yield variability estimates in six different microregions of the State of Goiás. Daily data of precipitation from weather stations of the National Water Agency were used. The differences among SPI time series scales were evaluated based on number and frequency of drought occurrence, the scale index accuracy related to the upland rice adjusted yield data and upland rice adjusted yield data deviation. It was concluded that the larger the time scale of the SPI, more persistent drought occurrence are identified and smaller are their number. The southern and north-northeast regions of Goiás were more prone to drought events with greater persistence, and annual scale showed greater sensitivity to estimate trends in adjusted rice yield.

Key words: drought index, grain yield, upland rice