

Foliar applied potassium nitrate reduced rice lodging incidence from 40% to 15%

Decreased lodging and increased stalk strength are associated with proper K nutrition. Therefore, the effect of K treatments on lodging of Baldo tall rice variety was studied at Qulin, Missouri (USA) in 1999 and 2000. A silty loam soil having 123 kg NH_4OAc extractable K/ha was used. Preplant application consisted of 54 kg K_2O /ha and midseason of two applications of 27 kg K_2O /ha, using KCl as K source. Two applications of 14 kg K_2O /ha as potassium nitrate ($2 \times 30 \text{ kg} = 60 \text{ kg KNO}_3/\text{ha}$) were compared to soil-applied KCl. Lodging of Baldo was significantly reduced by foliar applications with potassium nitrate at midseason (Figure 1).

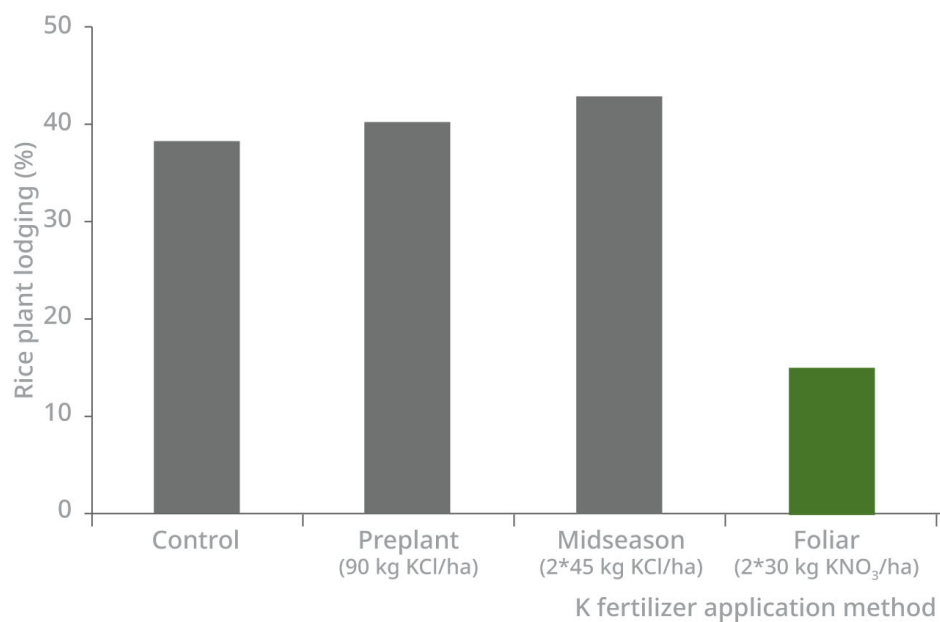


Figure 1.

Effect of K treatments on lodging of Baldo tall rice variety averaged across 1999 and 2000.