

Potassium nitrate outperformed potassium sulphate and potassium chloride in terms of potato tuber yield and size

Bester and Maree (1990) clearly showed the benefit of potassium nitrate as opposed to potassium chloride or potassium sulphate fertilization for potato in a pot experiment. Nutrient quantities applied were equal. Under controlled nutrition and environmental conditions, potassium nitrate application gave rise to greatest tuber yield (Figure 1). Greater number of tubers and significantly larger-sized tubers were produced by the potassium nitrate fed potato plants (Table 1).

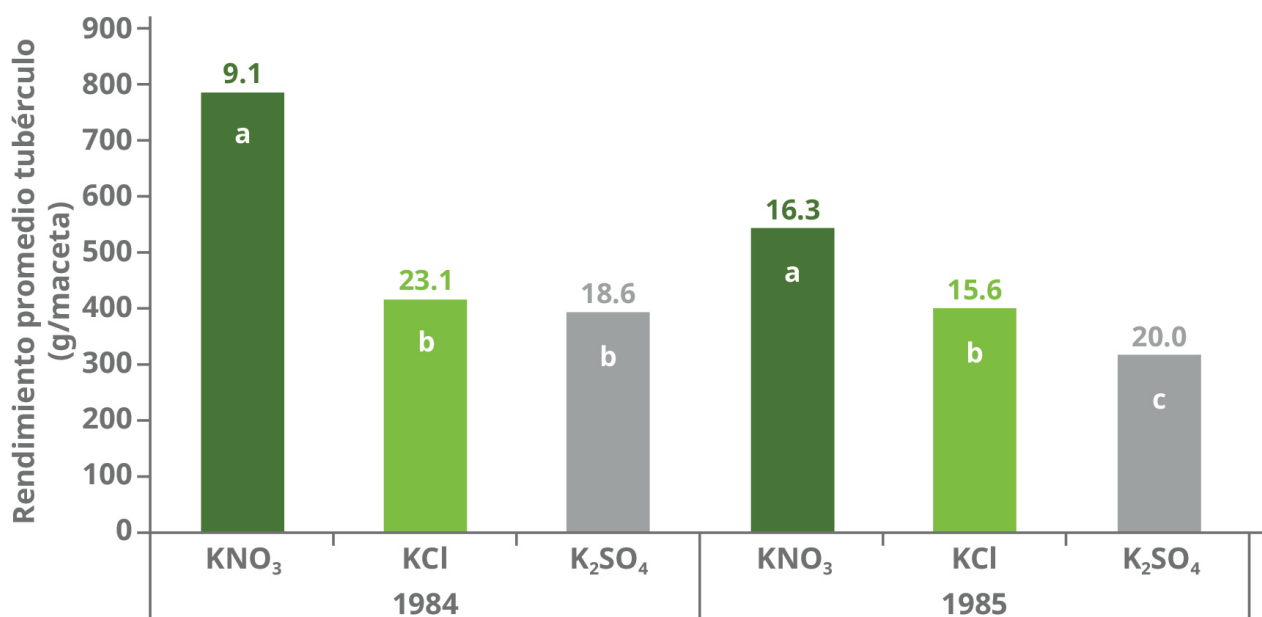
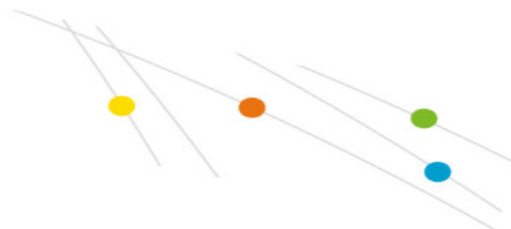


Figure 1. Average tuber yield (g/pot) for three K-sources in two cropping seasons.

Table 1. Effect of the K-sources on average tuber weight (g) and number of tubers produced.



Treatment	Av. individual tuber weight (g)		Av. nr of tubers per plant	
	1984	1985	1984	1985
KNO <sub>3</sub>	92,50 a	96,63 a	9,42 a	5,85 a
KCl	74,30 b	91,03 a	5,83 b	4,54 b
K <sub>2</sub> SO <sub>4</sub>	72,63 b	71,08 b	5,88 b	4,96 ab