

The influence of silicic acid on the chemical content of field peas of variety Mehis

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The purpose of this investigation was to look at the influence of silicic acid on the chemical content of field peas. There were two treatments: 1. stabilized silicic acid treatment, 2. untreated control. The silicic acid was applied as an aqueous spray applied from the 2-3 true leaf stage at two-weekly intervals on 21 May, 4 June, 18 June and 2 July 2014. The amounts sprayed were as follows: first spray 1.5 L ha⁻¹ silicic acid and 750 L ha⁻¹ water, second 3 L ha⁻¹ silicic acid and 1500 L ha⁻¹ water, third 4.5 L ha⁻¹ silicic acid and 2250 L ha⁻¹ water, fourth 4.5 L ha⁻¹ silicic acid and 2250 L ha⁻¹ water. The water used was demineralised with a neutral pH; the pH of the spray solution was 5.5. Control plants were untreated. The variety of field peas used was Mehis. Silicic acid partially improved the quality of field peas of variety Mehis: the content of phosphorus and potassium in field pea dry matter was higher in the silicic acid treatment than in the control treatment. The content of nitrogen, calcium and magnesium in field pea dry matter did not differ significantly between treatments.