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# Effects of Nitrogen and Potassium on Yield and Quality Of Potato (*Solanum Tuberosum* L.) Cultivars

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## Abstract

Effects of nitrogen (N) and potassium (K) fertilization rates on the yield and quality of two potato cultivars, Asterix and Courage were conducted. The treatment combination of N2K2 (N2: 140 kg ha<sup>-1</sup> and K2: 152 kg ha<sup>-1</sup>) had the highest total yield (31.38 and 22.51 t ha<sup>-1</sup>), marketable tuber yield (29.08 and 20.49 t ha<sup>-1</sup>) and chips potato yield (36.63 and 36.96%) of the 18 treatment combinations for Asterix and Courage cultivar, respectively. The treatment combination of N2K2 had also the highest specific gravity (1.07 and 1.17 gm<sup>-3</sup>), dry matter (22.65 and 22.77%), firmness (45.13 and 42.92 N), and lowest total soluble solid (4.30 and 4.23 oBrix) in both the cultivars, whereas the colour of the chips revealed the least crispness (0.15 and 0.17 N). In order to enhance potato processing quality without reducing production, a lower N and higher K treatment combination may be employed.

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