

# **Nitrogen and Sulphur Nutrition for Enhancing the Growth and Yield of Quality Protein Maize (QPM)**

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## **ABSTRACT**

A field experiment was conducted during *rabi*, 2014-15 at S.V. Agricultural College Farm, Tirupati to find out the response of quality protein maize hybrid (HQPM-1) to various N and S levels. The treatments consisted of four nitrogen levels (60, 120, 180, 240 kg N ha<sup>-1</sup>) in combination with three sulphur levels (15, 30, 45 kg S ha<sup>-1</sup>). The results of the experiment revealed that among the four nitrogen levels, application of 240 kg N ha<sup>-1</sup> recorded the maximum plant height (185.6 cm), leaf area index (2.64), dry matter production (10903 kg ha<sup>-1</sup>), grain yield (5101 kg ha<sup>-1</sup>) and stover yield (5569 kg ha<sup>-1</sup>) followed by 180, 120 and 60 kg N ha<sup>-1</sup>. Similarly, application of 45 kg S ha<sup>-1</sup> resulted in significantly more plant height (162.9 cm), leaf area index (1.87), dry matter production (8117 kg ha<sup>-1</sup>), grain yield (3679 kg ha<sup>-1</sup>) and stover yield (4029 kg ha<sup>-1</sup>) followed by lower levels of sulphur. Hence N and S can be applied at the rate of 240 kg ha<sup>-1</sup> and 45 kg ha<sup>-1</sup>, respectively to obtain higher yield.

Key words: *Growth, Nutrition, Quality protein maize.*