

Nitrogen level and cultivar effects on nodulation, dinitrogen fixation and yield of grain legumes: II. Common bean cultivars.

Keya, S O; Ssali, H

<http://erepository.uonbi.ac.ke:8080/xmlui/handle/123456789/34950>

Date: 1985

Abstract:

N fixation was studied by the ^{15}N method in *Phaseolus vulgaris* cv. Rose Coco, Canadian Wonder and Mwezi Moja grown in the field and given 0, 20 or 100 kg N/ha. Nodulation, DM yield and seed yield did not differ significantly between cv. or N treatments except that nodulation was decreased by the highest N rate and Canadian Wonder gave the lowest av. seed yield. Plants fixed 27.7-35.2 kg N/ha when 0-20 kg N/ha was applied, and N fixation was reduced by 15-47% by the highest N rate. Non-fertilizer soil N and fixed and applied N provided 67.4, 23.8 and 8.8% of total plant N at the low N rate and 51.6, 15.0 and 33.1% of plant N at the high N rate.