

NUTRIENT UPTAKE OF ASH GOURD [*BENINCASA HISPIDA* (THUNB.) COGN.] GERMPLASM

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Received-08.06.2020, Revised-27.06.2020

Abstract: A field experiment was conducted during *khari*f season of 2015-16 at All India Coordinated Research Project on Vegetable Crops, Odisha University of Agriculture and Technology, Bhubaneswar, to assess the nutrient uptake of different genotypes of ash gourd. Eighteen genotypes of ash gourd including 7 released variety (Kashi Dhawal, Kashi Ujwal, Kashi Surbhi, Pusa Ujjwal, Pusa Urmi, Pusa Sabji Petha and Pusa Shreyali) and 11 land races (BAGS-1, BAGS-2, BAGS-3, BAGS-4, BAGS-5, BAGS-6, BAGS-7, BAGS-8, BAGS-9, BAGS-10, BAGS-11) were used for the experiment. The nitrogen concentration of fruit showed a range of 0.59% (BAGS-6) to 1.18% (BAGS-3). Genotype BAGS-8 recorded maximum concentration of K (6.75%), S (0.80%) and Mn (229.70% mg kg⁻¹). BAGS-2, BAGS-10, Pusa Shreyali scored highest concentration of Zn (62.44 mg kg⁻¹), P (0.62%) and Ca (10.00%) respectively. Highest concentration of magnesium was seen in BAGS-6 as well as Pusa Ujjwal *i.e* 5.60% where as Pusa Urmi and BAGS-10 found to be lowest *i.e* 1.80%. BAGS-9 (6598.50 mg kg⁻¹) recorded highest concentration of iron followed by Pusa Shreyali (5230.40 mg kg⁻¹) and Kashi Surbhi (4852 mg kg⁻¹).

Keywords: Genotypes, Micronutrient, Nutrient, Season

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