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RESEARCH PAPER

Evaluation of F_1 hybrids of cashew (Anacardium occidentale L.)

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Abstract : An experiment on evaluation of F_1 hybrids of cashew (*Anacardium occidentale* L.) was conducted during the year 2018-2019 at Cashew Research Station, Odisha University of Agriculture and Technology, Bhubaneswar. Five F_1 progenies of cashew (BH-27, BH-105, BH2-6, BH-30 and BH-19) and their, parents (Bhubaneswar-1, Kankadi, M44/3, RP-1, RP-2 and VTH-711/4) and check varieties (Dhana, H-320 and BPP-8) were planted in the year 2014 following a spacing of 7.0 m². The experiment was laid out following the statistical design RBD and was replicated twice. All standard package of practices were followed to raise a good crop. In the present investigation, vegetative parameters, yield attributes and mean annual nut yield plant⁻¹ revealed a spectacular wide array of variations among the tested genotypes. F_1 hybrid, BH2-6 recorded maximum plant height (5.35m), total laterals m⁻² (27.63), flowering laterals m⁻² (26.88) and nut yield (4.25 kg/ plant⁻¹). Duration of flowering was recorded maximum in F_1 hybrid BH-105 (83.5 days). Parent, Kankadi recorded maximum trunk girth (47.62cm), canopy spread (6.90m in E-W direction), canopy area (123.24 m²), apple weight (97.75g) and nut weight (12.3 g), while check variety, Dhana recorded maximum canopy spread (6.44) in North-South direction and minimum duration of flowering (54.50 days). Parent, Bhubaneswar-1 recorded maximum nuts panicle⁻¹ (6.31) as well as shelling per cent (32.75%). Based on mean performance and heterosis, the hybrids BH2-6 and BH-19 were found to be promising for nut yield and shelling per cent.

Key Words : Evaluation, Cashew, Hybrids, Yield attributes, Nut yield

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