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Genetic Diversity of a Commercially Important Flower Crop - Jasmine and its Conservation under Coastal Humid Ecosystem of Goa

To contribute to the conservation and management of diversity in different *Jasminum* species, the study was conducted in Goa state during 2009-2015. Extensive and continues surveys were conducted for collection and conservation of different available *Jasminum* species in a repeatable and systematic matter under the context of conserving precious jasmine germplasm resources of Goa. Characterization of jasmine germplasm accessions were done according to descriptions which are categorized into four groups, viz., general plant growth, leaf, flower bud, flowering and flower characteristics. Significant differences were noticed among jasmine accessions for various morphological, flowering and floral-quality traits. Plant height at flowering in different accessions ranged from 66cm (J-7) to 143cm (J-5). J-6 had longest leaf length (12.5cm) and width (5.93cm). Fresh weight of the bud and flowers ranged from 0.052g (J-5) to 0.563g (J-1) and 0.046g (J-5) to 1.37g (J-10) respectively. Maximum flower bud diameter (1.14cm) was noticed in J-8 whereas it was shortest (0.264cm) in J-5. Maximum and minimum total flower bud length were recorded in J-8 (4.7cm) and J-10 (1.844 cm) respectively. Bud length and stalk length of flower buds was in the range of 2.54cm (J-6) to 0.854cm (J-5) and 2.30cm (J-14) to 1.075cm (J-8) respectively. Flowers of J-14 had longest corolla tube length (2.70cm) while it was shortest (0.864cm) in J-10. Flower diameter was recorded maximum (6.68cm) in J-6 while it was minimum in J-5 (1.96cm). Flowers of J-10 had maximum number of petals/flower (43) whereas lowest (5.0) was found in J-1. Length and width of flower petals ranged from 0.96cm in J-5 to 3.50cm in J-6 and 0.32cm (J-5) to 1.74cm (J-4) respectively. Maximum flower stalk length (2.80cm) was noticed in J-14 whereas it was shortest (1.10cm) in J-10.