RESEARCH ARTICLE

# SELECTION OF IMPORTANT YIELD COMPONENT CHARACTERS BASED ON GENETIC ANALYSIS IN CELERY (*APIUM GRAVEOLENS* L.)

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**Abstract:** Eleven genotypes (control and ten macromutants- maintained over generations through selfing) of Celery (*Apium graveolens* L.) are assessedbased on eight phenotypic traits (plant height, number of primary branches/plant, total branches/plant, number of compound umbels/plant, number of umbels/plant, number of umbellets of first inflorescence, total seed yield and harvest index) for selection of essential trait(s) maximizing yield through efficient breeding. ANOVA depict variations among the selected traits. Phenotypic and genotypic co-variance, heritability (broad sense) and genetic gain (5% level) performed reveal three important selection indices (total branches, no. of compound umbel and total umbel per plant) in celery.

**Keywords**: Celery, Germplasms, Quantitative traits, Selection

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