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In vitro Flowering of *Vigna* Species from Immature Hybrid Seed

Vigna is one of the most important genus of family Fabaceae which forms source of dietary protein. Large number of its species is widely cultivated as pulse crop. The average yield of these crops is low due to inherently limited yield potential of the present cultivars and their susceptibility to various diseases. There is need to widen the gene pool of *Vigna* species through interspecific hybridization. Attempts to obtain interspecific hybrids by conventional means have not succeeded significantly. The cultivated species of *Vigna* has restricted the conventional plant breeding programme to improve the yield because of its limited gene pool. The success of raising interspecific hybrids by conventional means has been very low equivalent to nothing. The interspecific hybrids obtained are often completely sterile or only partial fertile while relatively few are fertile. The present study focuses standardization of in vitro regeneration and flowering of *Vigna* species from immature interspecific hybrid seed. The attempt was made through random hybridization followed by applying embryo rescue technology. Successful in vitro protocol was developed which may be further tried for large scale production. Efficacy of best suitable media, phytohormone, number of cycles were standardized further resulted in vitro flowering and pod formation. Raising of interspecific hybrids through embryo rescue is expected to provide alternative solution for broadening the gene pool and generating the robust plants with enhance nutritional content.

Biography:

Susmita Shukla is PhD and M.Sc in Biotechnology and more than 17 years of teaching and research experience. She has received prestigious award as DBT travel grant for presenting research work in International conference at Singapore, IASc-INSA-NASI Summer Research Fellowship Award, BioCARe Women Scientist Award, Best Young Scientist Award, Scientist of the Year Award, Outstanding Scientist Award etc. She has also filed patent of commercial use and also organized National & International seminars and Indo- African Training Program for African Professionals. She has also handled some prestigious projects funded by Department of Biotechnology, Govt. of India. She has published research papers in reputed National and International journals and also presented her research work in various National and International conferences.