Burton, G.W. (1952). Quantitative inheritance in grasses. *Proc. 6th Int Grassland Cong.* **11 :** 277-283.

Buu, B.C. and Tuan, T.M. (1991). Genetic studies in the F_2 crosses for high grain quality. IRRN. 17:5.

Draper, N.R. and Smith, H. (1981). The step wise regression analysis procedure. In : Applied Rgression Analysis (2nd ed.) pp 307-313. John Wiley and Sons. New York.

Ghosh, S.C. (1993). Induced plant type mutants in a traditional aromatic rice cultivar and analysis of their yield and yield components. Ph. D.Thesis, Visva-Bharati. India.

Gravois, K.A. and McNew, R.W. (1993). Combining ability and heterosis in U.S. southern long grain rice. *Crop Sci.*, **33 :** 83-86.

Johnson, H.W., Robinson, H.F. and Comstock R.E. (1955). Estimation of genetic and environmental variability in Soyabean. *Agron. J.*, **47 :** 314-318.

Lush, J.K. (1940). Intra-sire correlation and regression of offspring on dams as a method of estimating heritability of characters. *Proc. of American Society of Animal Production*, **33 :** 293-301.

Manna, M. and Sasmal, B.G. (2000). Genetic variability and characters association of grain size of semideep rice. *Environment and Ecology.*, **18:** 714-717.

Nayak, A.R., Chaudhury, D. and Reddy, J.N. (2001). Correlation and path analysis in scented rice. *Indian J. Agric. Res.*, **35 :** 190-193

Panse, V.G. (1957). Genetics of quantitative characters in relation to plant breeding. *Indian J. Genet.*, **1:** 318-329.

Robinson, H.F., Comstock, R.E. and Harvey, P.H. (1951). Genotypic and phenotypic correlations in corn and their implications in selection. *Agron. J.*, **43 :** 282-287.

Tara Satyavathi, C, Bharadwaj, C. and Subramanyam, D. (2001). Variability, correlation and path analysis in rice varieties under different spacing. *Indian J. Agric. Res.*, **35:** 79-84.

Thakur, S.K., Sharma, N.P. and Sharma, S.N. (2000). Genetic variation and association studies in segregating population of rice *(Oryza sativa* L.). *Journal of Soils and Crop*, **10:** 316-318.

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Research Notes

Performance of ICGV 92093 Groundnut culture for *rabi*-summer season in Tamil Nadu.

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In Tamil Nadu groundnut is having an area of 9.58 lakh hectares with the production of 14.41 lakh tonnes and the productivity of 1504 kg/ha. All India area coverage under groundnut is 228.49 lakh hectares with a production of 207.34 lakh tonnes and the productivity of 907 kg/ha. In our state, nearly 15-22% of the area under groundnut is irrigated

Table 1. Performance of ICGV 92093 in Station Trials

Particulars	ICGV 92093	VRI 4	VRI Gn 5
Kharif 1999 dry pod yield (kg/ha)	3662	3095	-
Kharif 2000 dry pod yield (kg/ha)	2233	2147	2037
Rabi/summer 98 dry pod yield (kg/ha)	2189	2267	-
Rabi/summer 99 dry pod yield (kg/ha)	4005	2622	3241
Rabi/summer 2000 dry pod yield (kg/ha)	3670	3262	3016
Mean Dry pod yield (kg/ha)	3152	2679	2765
Percentage over check	13.9	0	0
Duration (days)	106	106	110
Diseases (1-9 scale)			
LLS	3.2	3.8	3.0
Rust	2.4	2.8	2.6
Pests (1-9 scale)			
Defoliator damage	2.5	3.0	2.8
Leaf miner	1.0	2.0	1.2

Table 2. Performance of the culture ICGV 92093 in Multilocation trials : Dry pod yield (kg/ha)

MLT Centres	ICGV 92093	VRI Gn5	COGn4	ALR 3
Vriddhachalam	1575	1472	1089	1367
Killikulam	569*	542*	568*	527*
Kumuur	3275	3558	2941	3350
Aliyarnagar	2933	1777	1510	1423
Vamban	1903	1368	1652	2188
Paiyur	1025	919	875	853
Coimbatore	2131	1750	1773	1752
Viringipuram	353*	1331	1317	1142
Mean	2140	1742	1593	1725
Percentage over VRI Gn5	22.8	-	-	-
Percentage over COGn4	34.3	-	-	-
Percentage over ALR 3	24.1	-	-	-

* Not calculated for average

in the *Rabi*-summer season. The yield potential is naturally higher than any other season. There are suitable varieties for *kharif* seasons *viz*., VRI 2, VRI 3 and VRI 4 but only one variety *viz*., VRI Gn 5 is found suitable for *Rabi*/ summer season. But this variety has the disadvantage of dormancy and has high oil content which reduces the germination percent very fast during storage. Hence to over come above defects, a culture *viz*., ICGV 92093 has been identified and found suitable for *rabi*-summer season.

The culture ICGV 92093 is a Virginia type maturing in 100-105 days. It is a derivative of the cross ICGV 86055 and ICGV 86699. In station trials, it has recorded a mean dry pod yield of 3152 kg/ha over past five seasons compared to 2679 kg/ha by VRI 4 and 2765 kg for VRI Gn 5 checks. The kernels of the culture ICGV 92093 are medium bold in size with rose testa colour. The shelling outturn is 74.2 per cent and oil content is 49.2% compared to VRI Gn 5 (51.5%). It has moderate resistant to late spot (3.8) and resistant to rust (2.4) (Table 1). Hence, it was forwarded to MLT testing.

During 2002, the culture ICGV 92093 has recorded a mean dry pod yield of 2140 kg/ha registering 22.8 % over VRI Gn 5 (1742 kg/ha) in Multilocation trial tested in eight locations (Table 2). Hence, this entry is proposed for ART testing and in AICRP trials.

During 2002-2003, the culture ICGV 92093 has recorded an average dry pod yield of 4571 kg/ha over eleven locations in MLT in *rabi*-summer seasons and registering 45% increased yield over the best check VRI Gn 5. Hence, this culture is best suited for *rabi*-summer season.

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Research Notes

Correlation and path analysis in brinjal *(Solanum melongena* L.)

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In Tamil Nadu, brinjal is grown over an area of 10,418 ha with 81,820 tonnes of an annual production (Anon, 2001). The study on genotypic association among yield and its component traits and the direct and indirect effects of the different components are invariably useful in improving selection efficiency. In brinjal, this information will be useful for selecting superior segregants from advanced generations. Hence an attempt was made to gather information on correlation between yield and its component characters and among the component characters as well as their direct