

Agri. Res. J. Kerala, 1977, 15 (2)

PERFORMANCE OF THE RICE VARIETIES SATYA, SOORYA AND SUHASINI IN KERALA

To the growing list of dwarf high yielding rice varieties three additions were made from Maharashtra in 1973. These varieties Satya, Soorya and Suhasini were acclaimed to be very heavy yielders yielding up to 11.5 tons per hectare (Anon, 1973). Performance of these varieties under Kerala conditions was studied in yield trials conducted over a period of three successive seasons in 1973-74 and 1974-75 at the Rice Research Station, Pattambi. The results of these trials are reported here.

Three yield trials were conducted one each during the *punja* season (December-January to March-April) 1973-74 and the *virippu* (April-May to September-October) and *mundakan* (September-October to December-January) seasons of 1974-75. The layout followed was randomised block design with four replications. Jaya and Sabari were the two check varieties used during all the three seasons, while the third check variety was Triveni during the first season and Bharathy during the other two seasons. Throughout the three seasons the NPK dose followed was 80:40:40 kg ha. Half the nitrogen was supplied at the time of planting along with the full doses of P₂O₅ and K₂O, and the remaining half in two equal split doses at 20 days' intervals from planting. The net plot size used was 5.4 m x 2.0 m and the planting was done with 2-3 seedlings per hill at a spacing of 20 cm x 15 cm.

As seen from the data presented in Table 1 all the three test varieties were lower yielders than the varieties Jaya, Sabari and Bharathy. In all the three seasons its yield was significantly higher than all the three test varieties.

All the three test varieties showed similar duration as Jaya, Sabari and Bharathy in all the three seasons. Triveni was earlier than all the other varieties by about three weeks in the one season in which it was tried. One interesting side observation was that all the six varieties showed much reduced duration of only 115 days during the *mundakan* season of 1974-75 when the actual nursery sowing was done on the eighth of September. Such a tendency for many of the medium duration high yielding varieties to show reduced durations with the nursery sowings in the first fortnight of September in Kerala has already been pointed out by Karunakaran (1976, Unpubl.). These trials have now shown that all the six varieties tested during the *mundakan* season of 1974-75 have this tendency.

table 1Grain yield and duration of the rice varieties Satya, Soorya and **Suhasini** at Pattambi, Kerala.

Variety	Mean grain yield per hectare (kg)			Mean of all the seasons	Seed to seed duration (days)			Grain production per day (kg/ha)		
	Puuja	Virippu	Mundakan		Punja	Virippu	Mundakan	Punja	Virippu	Mundakan
	73-74	74-75	74-75	Punja	Virippu	Mundakan	73-74	74-75	74-75	
				73-74	74-75	74-75	73-74	74-75	74-75	
Satya	3013	3125	3657	3255	125	128	115	24.10	25.00	28.57
Soorya	3038	2557	3106	2900	125	120	115	24.30	20.46	25.88
Suhasini	3268	3744	3061	3358	125	127	115	26.15	29.48	26.62
Jaya	3409	4514	4526	4150	125	128	115	27.27	35.16	39.36
Bharathy		446.2	3681	4071	—	127	115	—	35.13	32.01
Sabari	3328	3994	4341	3888	127	128	115	26.20	31.15	37.75
Triveni	2449	—	—	2449	105	—	—	23.10	—	—
C.Di (P=0.05)	523	748	489	—	—	—	—	—	—	—

In terms of mean grain production per day also Jaya topped the varieties under trial in all the three seasons; and the varieties Sabari and Bharathy also were superior to the three test varieties. The trials have clearly proved that the varieties Jaya, Sabari and Bharathy which are the most popular medium duration varieties of Kerala are definitely superior to the new Maharashtra rice varieties Satya, Soorya and Suhasini under Kerala conditions.

സംഗ്രഹം

മഹാരാഷ്ട്രയിൽ നിന്നും പുറത്തിറക്കിയ സത്യ, സൂര്യ, സുഹാസിനി എന്നീ മൂന്നു നെൽ ഇനങ്ങൾ പട്ടാമ്പി നെല്ലുഗവേഷണ കേന്ദ്രത്തിൽ 1973-74, 1974-75 കൊല്ലങ്ങളിലായി വിരിപ്പ്, മുണ്ടുകൾ, പുഞ്ച എന്നീ മൂന്നു വിളകാലങ്ങളിൽ പരീക്ഷിച്ചു നോക്കുകയുണ്ടായി.

ഈ **11/07/10763T3go** ജയ, ഭാരതി, ശബരി എന്നീ ഇനങ്ങളുമായി മുപ്പിൽ വ്യത്യാസം കാണിക്കുകയുണ്ടായില്ല. ത്രിവേണി എന്ന ഇനത്തേക്കാൾ മൂന്നാഴ്ചയോളം മുപ്പ് കൂടുതലാണ് ഇവയ്ക്ക് കണ്ടത്.

പരീക്ഷണം നടത്തിയ എല്ലാ വിളകാലങ്ങളിലും **taw**, ഭാരതി, ശബരി എന്നീ മൂന്നിനങ്ങളും ഈ മൂന്നു പുതിയ ഇനങ്ങളെക്കാൾ കൂടുതൽ വിളവ് തരുകയുണ്ടായി.

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(M. S. received: 24-2-1977)