GROUNDNUT CULTIVAR EVALUATION IN NAMIBIA 1991-95

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INTRODUCTION:

Groundnuts is a well-adapted crop in NAMIBIA. It is planted by both the commercial and communal farmer. Since independence NAMIBIA is part of the SADC Region and has been able to participate in the SADC Regional Groundnut project. The result of this was that NAMIBIA could test material from the project in Malawi and also germplasm from ICRISAT in Hydrabad India. More or less 700 lines of germplasm have been tested in the last 5 years.

MATERIALS AND METHODS:

Different lines of germplasm have been evaluated in different trials on the following research stations: Mahanene, Ogongo, Uitkomst, Mashare, Katima and Bagani. Material has been obtained from SADC/ICRISAT Malawi, ICRISAT India as well as from A.R.C. of S.A. Promising lines were selected and planted in a NAMIBIA National trial for further evaluation.

All the trials were planted in a randomized complete block design with 4 rows per plot, 4 meter long. The two middle rows were then harvested for evaluation.

RESULTS AND DISCUSSION:

The 1992/93 season ICGV-SM 87079 had a 28% higher seed yield than Sellie. ICGV-SM'S 87064 and 86061 were respectively 17% and 15% higher than Sellie. The results of

Table I Results of Namibia National Groundnut Variety Trial 1992/93

Entry	Uitkomst	Mahanene	Ogongo	Mashare	Katima	Bagani	Average
CGV-SM 86039	460.3	1084.1	398.2	643.5	239.6	851.9	687.6
CGV-SM 87080	539.0	758.4	508.2	933.9	111.3	1067.7	761.4
ICGV-SM 87019	218.9	769.1	290.3	364.2	139.8	947.2	517.9
ICGV-SM 86038	411.1	777.6	490.7	591.7	445.5	1303.1	700.4
ICGV-SM 86061	621.7	1089.1	324.0	884.9	338.2	1056.5	795.2
CGV-SM 87039	522.5	873.1	463.4	541.6	177.5	950.4	670.2
ICGV-SM 87079	426.2	1052.8	502.8	962.7	287.3	1528.9	840.9
ICGV-SM 87053	223.7	988.4	310.6	824.8	227.3	1174.8	704.5
ICGV-SM 87050	412.6	1074.4	353.9	767.4	303.9	1223.6	748.2
ICGV-SM 87064	560.6	781.5	505.9	790.4	335.7	1126.7	753.0
Sellie	412.6	816.0	397.0	727.4	118.7	943.8	
Local		998.2	166.0	142.9		1135.8	
Mean	437.2	912.8	392. 6	651.1	227.1	1117.5	
SE2.5	13.7	8.7	20.8	9.5	18.9		

In Table 1 the five best cultivars are ICGV-SM 87079, ICGV-SM 86061, ICGV-SM 87080, ICGV-SM 87050 and ICGV-SM 87064.

Table 2 Namibia National Groundnut Variety Trials 1993/94

Entry	Mahanene	Uitkomst	Bagani	Katima	Average
ICGV-SM 87079	213.1	1861.1	301.0	235.9	652.8
ICGV-SM 86021	172.8	1265.2	592.7	191.6	580.6
ICGV-SM 87064	125.7	1518.0	446.9	168.8	564.9
ICGV 87403	306.2	1342.5	433.5	115.0	549.8
ICGV 90122	286.0	1438.5	370.9	82.7	544.5
ICGV 86294	244.0	1385.9	449.4	86.0	541.3
ICGV 86929	216.4	1111.4	506.9	154.1	497.2
ICGV 90121	243.3	1205.7	397.0	78.1	481.0
ICGV-SM 91002	122.0	1029.4	556.9	47.0	438.8
ICGV 86270	168.5	985.2	445.2	98.5	424.4
JL 24	121.2				121.2
Flo-Runner	129.0				
Average	195.9	1324.3	450.0	127.2	
SE	15.0	52.32	28.78	10.5	

In Table 2 the five best cultivars are ICGV-SM 87079, ICGV-SM 86021, ICGV-SM 87064, ICGV 87403 and ICGV 90122.

Table 3: Namibia National Groundnut Variety Trail 1994/95.

Entry	Bagani	Mahanene	Uitkomst	Average
ICGV 87981	748.30	158.05	971.24	625.84
ICG 274	507.67	58.21	1070.06	517.31
ICG 405	319.98	82.33	856.33	545.31
ICG 3401	528.58	71.17	876.26	492.00
ICGV-SM 89709	288.28	78.92	809.11	392.10
ROBBIE	552.74	86.75	665.81	435.1
FLAMINGO	435.43	81.48	995.67	504.19
ANEL	634.53	148.12	865.04	549.23
JASPER	497.02	151.12	773.46	473.87
ICGV-SM 87064	853.11	100.17	616.30	523.19
KWARTS	503.50	89.17	903.73	498.88
HARTS	549.19	95.83	1076.45	573.82
ICGV-SM 87079	850.32	92.08	879.67	607.36
ICGV 86054	501.77	96.96	1139.73	579.49
LOCAL	805.70	118.92	630.56	518.39
AVERAGE	571.74	100.62	875.29	
SE2	5.12	6.95	48.13	

the National trials which contain the selected germplasm for further evaluation are displayed in Tables 1 to 3.

In Tables 1 - 3 it is clear that of the selected material ICGV-SM 87064 and ICGV-SM 87079 are constantly good. In 1992/93 it ranked under the 5 best cultivars as an average for all the stations. In 1993/94 it ranked under the 3 best cultivars. In 1994/95 season ICGV-SM 87079 ranked second with an average yield of 609,36 kg/ha. and ICGV-SM 87064 seventh with 523,82 kg/ha Harts and Anel also showed good potential.

CONCLUSION:

Cultivars Harts and Anel are commercially available cultivars and can be used by the farmer for planting. ICGV-SM 87079 and ICGV-SM 87064 are available for on-farm testing for further evaluation. If ICGV-SM 87079 and ICGV-SM 87064 are accepted by the farmers as good varieties, seed will be available to the farmer for planting in 1998. These varieties prove to be quite adaptable and can reduce the risk of groundnut production using recommended cultivation methods common to groundnuts.