

(Freeman et al. 1999). The average groundnut yield among smallholder farmers using local varieties is about 0.45 t ha<sup>-1</sup>. A net output of 1.16 t ha<sup>-1</sup> therefore represents a yield advantage of 0.71 t ha<sup>-1</sup>. This yield advantage therefore represents the benefit that farmers would get simply by replacing local groundnut varieties with improved groundnut varieties such as CG 7.

### Net benefit

The net benefits in high, medium, and low input levels were MK 45,198 (US\$ 695) ha<sup>-1</sup>, MK 26,968 (US\$ 415) ha<sup>-1</sup>, and MK 17,389 (US\$ 268) ha<sup>-1</sup>, respectively. The value of haulms is not included in the analysis since information on prices of haulms is not available in Malawi. These results therefore represent lower bound of likely returns to farmers investing in groundnut production.

The results have shown that there are quite substantial returns to groundnut production at all input levels. The benefit-cost ratio of greater than one at all input levels simply suggests that it is worthwhile investing in groundnut production. Since 65% of Malawi's population is poor, cultivation of improved groundnut varieties can therefore play an important role in alleviating poverty in the smallholder sector.

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### References

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## Groundnut Releases

### New Groundnut Released in Malawi

P Subrahmanyam of ICRISAT-Lilongwe, Malawi reports that the Agricultural Technology Release Committee of the Government of Malawi has approved the release of ICG 12991 for cultivation in Malawi. ICG 12991 is a high-yielding, short-duration variety with resistance to groundnut rosette. This is the first rosette resistant short-duration variety released in the southern and eastern Africa region.

About 18% of Malawi's groundnut area is covered with ICRISAT/DARTS developed improved varieties. With the recent releases (two in 2000 and one in 2001), and available funds from the ICRISAT/USAID Project for seed multiplication, the area under improved varieties will further increase. About US\$ 0.35 million may be generated for groundnut seed production during 2001 through the revolving fund.

### New Groundnut Varieties Released in Indonesia

Three groundnut varieties have been released recently for cultivation in Indonesia. Of these, ICGV 86031 and 87358 are direct introductions from ICRISAT. In Indonesia, groundnut varieties are named after animals, so the former has been named as Kancil (mouse deer) and the latter as Turangga (horse).

Kancil is reported resistant to bacterial wilt and *Aspergillus flavus*, and tolerant to rust, leaf spot, and leaf chlorosis. It contains 50% oil and 30% protein. In the tests conducted at ICRISAT, it showed resistance to thrips, jassids, leaf miner, *Spodoptera*, and bud necrosis virus. It is also insensitive to photoperiod. Turangga is reported resistant to bacterial wilt, and moderately resistant to rust, leaf spot, and *A. flavus*. It is also tolerant to drought stress and shading. It has 47% oil content.

Sima, the third variety, is selected from a cross between ICGV 87165 and Majalengka. It is reported moderately resistant to *A. flavus* and tolerant to rust, leaf spot, drought, and acid soils. It contains 43% oil and 22% protein. ICGV 87165 is an interspecific derivative developed at ICRISAT.

Till date, Indonesia has released six varieties of groundnut, which either originate from ICRISAT or are derived from ICRISAT-bred materials. The earlier three releases include ICG 1697 as Singa, ICG 1703 as Panter, and ICGV 86021 as Jerapah.

## Groundnut Varieties Approved by the Plant Material Identification Committee (PMIC), ICRISAT during 2000-01

Original name	Genebank accession no.	Justification	Scientists/Researchers
ICGV 87354	ICG 15384	Drought tolerant and rust resistant elite germplasm	LJ Reddy, SN Nigam. RC Nageswara Rao, and NS Reddy
ICGV 94361	ICG 15385	High yielding and early maturing, less susceptible to rust	HD Upadhyaya, SN Nigam. S Pande, AGS Reddy, and N Yellaiah
ICGV 86326	ICG 15386	Released in Korea as Jeokwangtangkong	Youn Sup Oh, Young Keun Cheon. Moon Soo Park, Soo Yeon Cho, SL Dwivedi, and SN Nigam
ICGV 91278	ICG 15387	Resistant to <i>Aspergillus flavus</i> , high yielding	HD Upadhyaya. SN Nigam, VK Mehan. AGS Reddy, and N Yellaiah
ICGV 91283	ICG 15388	Resistant to <i>A. flavus</i> , high yielding	HD Upadhyaya, SN Nigam, VK Mehan, AGS Reddy, and N Yellaiah
ICGV 91284	ICG 15389	Resistant to <i>A. flavus</i> , high yielding	HD Upadhyaya, SN Nigam, VK Mehan, AGS Reddy, and N Yellaiah
ICGV 92267	ICG 15390	High yielding and early maturing, less susceptible to rust and late leaf spot	HD Upadhyaya, SN Nigam. AGS Reddy, and N Yellaiah
ICGV 86143	ICG 15391	High-yielding, released as BSR 1 in Tamil Nadu, India	HD Upadhyaya. SN Nigam, MJ Vasudeva Rao, NS Reddy, N Yellaiah, and AGS Reddy
ICGV 86155	ICG 15392	High-yielding Spanish variety with 4 weeks post-maturity fresh-seed dormancy	HD Upadhyaya, SN Nigam, MJ Vasudeva Rao, AGS Reddy, N Yellaiah. and NS Reddy
ICGV 86156	ICG 15393	High-yielding Spanish variety with 4 weeks post-maturity fresh-seed dormancy	HD Upadhyaya, SN Nigam, MJ Vasudeva Rao, AGS Reddy, N Yellaiah. and NS Reddy
ICGV 86158	ICG 15394	High-yielding Spanish variety with 4 weeks post-maturity fresh-seed dormancy	HD Upadhyaya, SN Nigam, MJ Vasudeva Rao, AGS Reddy, N Yellaiah, and NS Reddy
ICGV 87378	ICG 15395	High-yielding Spanish variety with 4 weeks post-maturity fresh-seed dormancy	HD Upadhyaya, SN Nigam, MJ Vasudeva Rao, AGS Reddy, N Yellaiah. and NS Reddy
ICGV 87921	ICG 15396	High-yielding Spanish variety with 4 weeks post-maturity fresh-seed dormancy	HD Upadhyaya, SN Nigam, MJ Vasudeva Rao, AGS Reddy, N Yellaiah, and NS Reddy
ICGV 92196	ICG 15400	Early maturing, high yielding	HD Upadhyaya, SN Nigam, MJ Vasudeva Rao, AGS Reddy, N Yellaiah, and NS Reddy
ICGV 92206	ICG 15397	Early maturing, high yielding	HD Upadhyaya, SN Nigam, MJ Vasudeva Rao, AGS Reddy, N Yellaiah, and NS Reddy
ICGV 92234	ICG 15398	Early maturing, high yielding	HD Upadhyaya. SN Nigam, MJ Vasudeva Rao, AGS Reddy, N Yellaiah, and NS Reddy
ICGV 92243	ICG 15399	Early maturing, high yielding	HD Upadhyaya. SN Nigam, MJ Vasudeva Rao, AGS Reddy, N Yellaiah, and NS Reddy
ICGV 86011	ICG 15401	Spanish variety with 15 days seed dormancy, released as ALR 2 in Tamil Nadu, India	P Vindhivavarman, A John Joel, V Mylswami, P Nagarajan, CS Raveendran, SL Dwivedi, SN Nigam, and GV Ranga Rao
ICGV 86388	ICG 15402	High yielding, moderately resistant to bud necrosis virus and thrips, resistant to jassids	SL Dwivedi, SN Nigam, DVR Reddy. GV Ranga Rao, and AS Reddy
ICGV 93470	ICG 15403	Early-maturing Spanish variety with 3-4 weeks of postharvest dormancy	HD Upadhyaya. SN Nigam, AGS Reddy, and N Yellaiah
ICGV 93382		Early maturing, high yielding, released as Sinpadetha 7 in Myanmar	HD Upadhyaya, SN Nigam, AGS Reddy, and N Yellaiah
ICGV 88438		Released as Nikokleia for cultivation in Cyprus	A Hadjichristodoulou, G Alexandrou. Chr Theodorides. M Mouzouris, SL Dwivedi, and SN Nigam
ICGV 89214		Released as Kouklia for cultivation in Cyprus	A Hadjichristodoulou. G Alexandrou, Chr Theodorides, M Mouzouris. SL Dwivedi, and SN Nigam
ICGV 99001		Source of resistance to late leaf spot	AK Singh, SL Dwivedi. S Pande. JP Moss, SN Nigam, and DC Sastry
ICGV 99003		Source of resistance to rust	AK Singh, SL Dwivedi, S Pande, JP Moss, SN Nigam, and DC Sastry
ICGV 99004		Source of resistance to rust and late leaf spot	AK Singh. SL Dwivedi. S Pande, JP Moss, SN Nigam, and DC Sastry
ICGV 99005		Source of resistance to rust	AK Singh, SL Dwivedi, S Pande. JP Moss, SN Nigam, and DC Sastry