
Groundnut Variety

ICGS 35 (ICGV 87127)



- Released as 'Jinpungtangkong' for cultivation in the Republic of Korea, where it showed:
 - wide adaptability;
 - early maturity;
 - average oil content 53%;
 - average protein content 24%;
 - average shelling turnover 72%.
- Higher pod yield than Kadiri 3 in India



ICRISAT

Plant Material Description no. 39

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Purpose of Description

ICGS 35 (ICGV 87127), an advanced breeding line, was introduced into the Republic of Korea from ICRISAT Center, India, in 1981. It was subsequently released for cultivation there as Jinpungtangkong in 1986.

Origin and Development

ICGS 35 was developed at ICRISAT Center from a single plant selected in 1977/78 in a natural hybrid population of an Indian cultivar Robut 33-1 (also known as Kadiri 3) following the bulk pedigree method. Its pedigree is (Robut 33-1)-24-16-B₁-B₁-B₁-B₁-B₁-B₁-B₁-B₁-B₁.

Performance

In the Republic of Korea, ICGS 35 was evaluated in multilocal trials during 1982/83 to 1986 (Table 1). It produced, on average, 15-32% higher seed yield than local cultivars Olatangkong, Yeonghotangkong, and Saedletangkong. Its maturity period was similar to that of Saedletangkong but shorter than that of Yeonghotangkong. Its average shelling turnover in these trials was 71%.

ICGS 35 produced an average pod yield of 5.6 t ha⁻¹ in the five postrainy seasons (1979/80 to 1983/84) and 2.5 t ha⁻¹ in the three rainy seasons (1980, 1982, and 1983) at ICRISAT Center. The average pod yield over eight seasons was 14% higher than that of the parent cultivar Robut 33-1.

ICGS 35 has a similar reaction to rust (*Puccinia arachidis* Spegazzini), late leaf spot [*Phaeoisariopsis personata* (Berk. and M.A. Curtis) Van Arx], early leaf spot (*Cercospora arachidicola* Hori), and phoma [*Didymella arachidicola* (Chock.) Taber, Pettit and Philley] as the local cultivar Saedletangkong in the Republic of Korea. It had a score of 5 each for rust and late leaf spot, 3 for early leaf spot, and 7 for phoma, on a 0-9 scale where 0 = no disease and 9 = highly susceptible.

Plant Characters

ICGS 35 has an erect growth habit, sequential flowering, small- to medium-sized elliptic dark green leaves, and orange flowers. Its plant height (main axis) is 47 cm.

Pod/Seed Characters

ICGS 35 has 2-seeded pods which have a deep constriction, slight-to-none beak, and slight pod reticulation. Pod ridges are absent. Its seed are tan with a 100-seed mass of 44 g. The seeds contain 53% oil and 24% protein. It has an average oleic/linoleic acid ratio of 1.07.

Table 1. Performance of ICGS 35 (Jinpungtangkong) and local cultivars, 1982/83 to 1986, Republic of Korea.

Cultivar	Seed yield (t ha ⁻¹)				Mean
	1982/83	1984	1985/86	1986	
Jinpungtangkong ¹	2.75	3.44	2.88	3.02	3.02
Olatangkong	2.12	- ²	-	2.44	2.28
Yeonghotangkong	2.45	2.56	2.35	-	2.45
Saedletangkong	-	2.56	2.65	2.67	2.63

1. Percentage increase in seed yield of Jinpungtangkong over Olatangkong = 32%;
Yeonghotangkong = 23%; and Saedletangkong = 15%.

2. - = Not tested.

Plant Material Descriptions from ICRISAT

Leaflets in this series provide brief descriptions of crop genotypes identified or developed by ICRISAT, including:

- germplasm accessions with important agronomic or resistance attributes;
- breeding materials, both segregating and stabilized, with unique character combinations; and
- cultivars that have been released for cultivation.

These descriptions announce the availability of plant material, primarily for the benefit of the Institute's cooperators. Their purpose is to facilitate the identification of cultivars and lines and to promote their wide utilization. Requests should be addressed to the Director General, ICRISAT, or to appropriate seed suppliers. 'Stocks for research use issued by ICRISAT are sent to cooperators and other users free of charge.

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