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# Groundnut Variety ICGS 114

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- Released for cultivation in the Guinean and Sudan Savannah Zones of Ghana
- Mainly 2-seeded pods with deep red testa
- Matures in 102 days; 2 weeks earlier than the local cultivar F-mix in Ghana
- Has higher shelling percentage and 100-seed mass than F-mix
- Has moderate resistance to jassids in India



**ICRISAT**

**Plant Material Description no. 45**

International Crops Research Institute for the Semi-Arid Tropics  
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ICGS 114 was introduced into Ghana in 1985. In 1989, it was released as Sinkarzei by the Crops Research Institute Varietal Release Committee of the Nyankpala Agricultural Experiment Station, Tamale, Ghana, for cultivation in the Guinean and Sudan Savannah Zones of the country.

## Origin and Development

ICGS 114 was developed at ICRISAT Center, Patancheru, India. It was selected following the bulk pedigree method from a three-way cross between GAUG 1 and Kadiri 3, two adapted cultivars in India, and an introduced germplasm line NC Ac 17090 (ICG 1697). NC Ac 17090 is resistant to rust (*Puccinia arachidis* Speg.) and tolerant of late leaf spot (*Phaeoisariopsis personam* Berk. & Curt.). The pedigree of ICGS 114 is [(GAUG 1 x NC Ac 17090) x Kadiri 3] F<sub>2</sub>-B<sub>1</sub>-B<sub>3</sub>-B<sub>4</sub>-B<sub>2</sub>-B<sub>1</sub>.

## Synonym

Sinkarzei.

## Performance

In multilocal trials in Ghana, the performance of ICGS 114 was evaluated along with the local cultivar, F-mix, during the 1986-89 rainy seasons. The seed yield of ICGS 114 was similar to that of F-mix but ICGS 114 matured 2 weeks earlier and had a greater shelling percentage and 100-seed mass than F-mix (Table 1).

**Table 1. Average performance of groundnut variety ICGS 114 and local cultivar F-mix, Ghana, 1986-89 rainy seasons.**

Variety	Seed yield (t ha <sup>-1</sup> )	Days to 50% maturity	Shelling percentage	100-seed mass (g)	Oil (%)	Disease score <sup>1</sup>	
						Rust	Early leaf spot
ICGS 114	1.35	102	78	62	45	3	3
F-mix	1.36	118	76	51	49	3	2

1. Scored on a 1-5 scale, where 1 - no disease, and 5 = highly diseased.

Source: NAES (1986-89).

At ICRISAT Center, India, ICGS 114 showed a moderate level of resistance to jassids and was less susceptible to late leaf spot than variety TMV 2. At this location, its seeds contained 49.8% oil and 23% protein.

## **Plant Characters**

ICGS 114, which belongs to the sequentially branching group, has a decumbent-1 growth habit. It has medium-sized leaves and has 5-7 primary and 2-5 secondary branches. The main axis is 21 cm high with a 37 cm broad canopy. It matures in 102 days in Ghana.

## **Pod/Seed Characters**

ICGS 114 has mainly 2-1 seeded pods with moderate constriction and reticulation. It has a shelling percentage of 78. Its seeds are deep red, with a 100-seed mass of 62 g. The seeds contain 45% oil.

## **Reference**

**NAES (Nyankpala Agricultural Experiment Station). 1986-89.** Annual report. Tamale, Ghana: Nyankpala Agricultural Experiment Station.

## **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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