

‘GEORGIA-23RKN’

A New High-Yielding, Normal-Oleic, TSWV-Resistant and RKN-Resistant, Runner-Type Peanut Variety

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‘Georgia-23RKN’ is a new high-yielding, normal-oleic, TSWV-resistant and root-knot nematode (RKN)-resistant, runner-type peanut variety that was released in 2023 by the Georgia Agricultural Experiment Stations. It was developed at the University of Georgia, Coastal Plain Experiment Station in Tifton, GA.

Georgia-23RKN has significantly less TSWV and total disease incidence compared to the Tifguard and TifNV-High O/L varieties in Georgia (Table 1). It also has very high-level of RKN resistance similar to Georgia-14N (Table 2). However, Georgia-23RKN has a normal-oleic fatty acid O/L ratio similar to Tifguard. Georgia-23RKN combines high yield and dollar values with high TSWV-resistance and RKN-resistance in a normal-oleic, medium-large seeded, runner-type peanut variety.

Very limited seed supplies will be available of Georgia-23RKN for 2024 and 2025. In fact, all Breeder Seed will go toward Foundation Seed increase this coming year.

Table 1. THREE-YEAR (29 TESTS) AVERAGE DISEASE INCIDENCE, POD YIELD, TOTAL SOUND MATURE KERNELS (TSMK), SEED COUNT, AND DOLLAR VALUES OF GEORGIA-23RKN AND THREE OTHER RKN-RESISTANT PEANUT CULTIVARS AT MULTILOCATIONS IN GEORGIA, 2015-17.

Runner Variety	TSWV (%)	TD (%)	Yield (lb/a)	TSMK (%)	Seed (no./lb)	Value (\$/a)
Georgia-23RKN	4	11	4863	75	656	886
*TifNV-High O/L	7	16	4873	73	619	853
Tifguard	6	15	4796	73	631	852
*Georgia-14N	4	13	4623	76	767	850

***High-Oleic**

Table 2. AVERAGE TOMATO SPOTTED WILT VIRUS (TSWV), ROOT-KNOT NEMATODE (RKN) COUNT, GALL RATING, AND POD YIELD OF GEORGIA-23RKN VS RKN-SUSCEPTIBLE CHECK CULTIVAR (GEORGIA-07W) AND RKN-RESISTANT CULTIVAR (GEORGIA-14N) IN A HIGHLY INFECTED RKN FIELD TEST AT ATTAPULGUS, GA, 2015.

Runner Variety	TSWV (%)	RKN (no.)	Gall Rating (0-100%)	Pod Yield (lb/a)
Georgia-23RKN	1.2	1.8	0.0	5216
Georgia-14N	3.2	9.4	0.0	4890
Georgia-07W (ck)	2.0	532.0	60.0	2997