

‘GEORGIA-20VHO’

A New High-Yielding, High-Grading, Very High-Oleic, TSWV-Resistant, Runner-Type Peanut Variety

by

Dr. Wm. D. Branch
University of Georgia
Coastal Plain Expt. Station
Tifton Campus

‘Georgia-20VHO’ is a new high-yielding, high-grading, very high-oleic, TSWV-resistant, runner-type peanut variety that was released in 2020 by the Georgia Agricultural Experiment Stations. It was developed at the University of Georgia, Coastal Plain Experiment Station in Tifton, GA.

Georgia-20VHO has a significantly higher percentage of total sound mature kernel (TSMK) grade compared to several other high-oleic runner varieties in Georgia (Table 1). It was also among the lowest in TSWV and total disease incidence and among the highest in pod yield and dollar values compared to TUFRunner ‘297’, FloRun ‘331’, TifNV-High O/L, and TUFRunner ‘511’ when grown with maximum-input production practices including irrigation.

Georgia-20VHO also has a significantly higher oleic to linoleic fatty acid ratio compared to other high-oleic runner-type varieties (Table 2). Georgia-20VHO combines high yield, grade, and dollar values with TSWV-resistance and very high-O/L ratio for longer shelf-life of peanut and peanut products.

Very limited seed supplies will be available for Georgia-20VHO in the 2021 planting season. So, interested seedmen and growers should consider an early seed request for the upcoming growing season.

Table 1. THREE-YEAR AND TWO-PLANTING DATE (APRIL AND MAY) AVERAGE DISEASE INCIDENCE, POD YIELD, TSMK GRADE, SEED COUNT, AND DOLLAR VALUES OF GEORGIA-20VHO VS. FOUR OTHER HIGH-OLEIC RUNNER-TYPE PEANUT VARIETIES IN GEORGIA, 2017-19.

Runner Variety	TSWV* (%)	TD** (%)	Yield (lb/a)	TSMK*** (%)	Seed (no./lb)	Value (\$/a)
Georgia-20VHO	6	16	5653	81	663	1105
TUFRunner '297'	9	23	5256	78	587	992
FloRun '331'	12	25	4920	77	700	912
TifNV-High O/L	9	18	4884	77	636	902
TUFRunner '511'	14	29	4775	78	620	894

*TSWV = Tomato Spotted Wilt Virus; **TD = Total Disease; ***TSMK = Total Sound Mature Kernels.

Table 2. THREE-YEAR AND TWO-PLANTING DATE (APRIL AND MAY) AVERAGE OLEIC TO LINOLEIC FATTY ACID RATIOS OF GEORGIA-20VHO VS. FOUR OTHER HIGH-OLEIC RUNNER-TYPE PEANUT VARIETIES IN GEORGIA, 2017-19.

Runner Variety	O/L Ratio (1:1) [†]			3-Yr Mean
	2017	2018	2019	
Georgia-20VHO	48*	46	44	46
FloRun '331'	41	38	32	37
TUFRunner '511'	34	34	32	33
TUFRunner '297'	31	32	31	31
TifNV-High O/L	29	34	29	31

[†]Oleic (O) divided by Linoleic (L) = O/L ratio on a 1 to 1 percent basis.

*Example 48 = 48% Oleic to 1% Linoleic.