

# The Georgia Peanut Breeding Program

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# GEORGIA PEANUT BREEDING OBJECTIVES

- Increasing Dollar Value Returns
- Higher Yields and Grades
- Disease and Insect Resistance
- Virus and Nematode Resistance
- Drought and Aflatoxin Resistance
- Improved Shelling Characteristics
- Better Processing Qualities
- Longer Shelf-Life
- Enhanced Flavor and Nutrition

# TEN HIGH-YIELDING GEORGIA RUNNER-TYPE PEANUT VARIETIES

<u>Normal-Oleic</u>	<u>*High-Oleic</u>
Georgia-06G	*Georgia-09B
Georgia Greener	*Georgia-14N
Georgia-12Y	*Georgia-16HO
Georgia-18RU	*Georgia-20VHO
Georgia-21GR	*Georgia-22MPR

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# **GEORGIA-06G**

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- **New High-Yielding, TSWV Resistant, Runner-Type Variety**
  - **Intermediate Runner Growth Habit with Dark Green Leaf Color**
  - **Medium Maturity, Similar to Georgia Green**
  - **High Levels of TSWV Resistance with Large Runner Seed Size**
  - **Very Productive and Good Stability across Different Environments**
  - **Excellent for the Runner-Market Trade**
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# RE-INTRODUCTION OF “GEORGIA-06G”

- \* **First released in 2006 by the University of Georgia.**
- \* **Georgia-06G soon replaced Georgia Green as the dominant runner-type in the SE production area.**
- \* **In 2019, Georgia-06G was re-introduced from 2011 Breeder Seed stock that had been in cold storage.**
- \* **In 2023, all of Georgia Foundation Seed was planted from this new seed source beginning with only 10,000 SMK in 2019.**

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# **GEORGIA GREENER**

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- **New High-Yielding, TSWV and CBR Resistant, Runner-Type Variety**
  - **Intermediate Runner Growth Habit with Dark Green Leaf Color**
  - **Medium Maturity, Similar to Georgia Green**
  - **High Levels of TSWV and CBR Resistance with Medium Runner Seed Size**
  - **Very Productive and Good Stability across Different Environments**
  - **Excellent for the Runner-Market Trade**
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# GEORGIA-12Y

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- **High-Yielding, High TSWV and White Mold Resistant, Runner-Type Cultivar.**
  - **Runner Growth Habit with Dark Green Leaf Color and Medium Late Maturity (Similar to Georgia-10T).**
  - **Very High Levels of TSWV Resistance and White Mold or Stem Rot Resistance.**
  - **Good Performance and Stability across Many Different Environments, including Reduced Input Tests.**
  - **Another Excellent Runner-Type for an Early-Planting Date Option.**
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# GEORGIA-18RU

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- **High-Yielding, Leaf Scorch-Resistant, TSWV-Resistant, Medium-Seeded, Runner-Type Cultivar.**
  - **Runner Growth Habit with Medium+ Maturity and Medium Green Leaf Color.**
  - **High Levels of Leaf Scorch and TSWV Resistance with a High Percentage of Total Sound Mature Kernel Grade.**
  - **Good Performance and Stability across Many Different Environments.**
  - **Excellent Peanut Cultivar for the Normal-Oleic Runner Market Type.**
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# GEORGIA-21GR

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- **New High-Yielding, High-Grading, TSWV-Resistant, Normal-Oleic, Runner-Type Cultivar.**
  - **Flat Runner Growth Habit with Medium+ Maturity.**
  - **High Percentage of Total Sound Mature Kernel (TSMK) Grade.**
  - **Normal-Oleic Fatty Acid Ratio.**
  - **Very Good Performance and Stability across Many Different Environments.**
  - **Excellent Peanut Cultivar for the Normal-Oleic Runner Market Type.**
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# GEORGIA-09B

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- **High-Yielding, High-Oleic, TSWV-Resistant, Runner-Type Cultivar**
  - **Intermediate Runner Growth Habit and Medium Maturity  
(Very Similar to Georgia Green, the Recurrent Parent)**
  - **High Levels of TSWV Resistance with Medium Runner Seed Size**
  - **Very Productive and Good Stability across Different Environments**
  - **High-Oleic and Low-Linoleic Oil with Lower Total Saturated Fats**
  - **Excellent Roasted Peanut Flavor for the Runner-Market Trade**
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# GEORGIA-14N

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- **High-Yielding, High-Oleic, TSWV and Root-Knot Nematode Resistant, Runner-Type Cultivar.**
  - **Intermediate Runner Growth Habit with Medium+ Maturity and Medium Green Leaf Color.**
  - **High Levels of TSWV Resistance and Root-Knot Nematode Resistance.**
  - **Good Performance and Stability across Many Different Environments in the S.E.**
  - **Excellent High-Oleic Runner-Type with a Medium Small Runner Seed Size for Field Areas with High RKN Populations.**
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# GEORGIA-16HO

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- **High-Yielding, High-Oleic, TSWV-Resistant, Large-Seeded, Runner-Type Cultivar.**
  - **Intermediate Runner Growth Habit with Medium Maturity and Medium Green Leaf Color.**
  - **High Levels of TSWV Resistance with a High Percentage of Jumbo Runner Seed Size.**
  - **Good Performance and Stability across Many Different Environments, Especially with Minimum-Inputs and without Irrigation.**
  - **Excellent Peanut Cultivar for the High-Oleic Runner Market Trade.**
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# GEORGIA-20VHO

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- **New High-Yielding, TSWV-Resistant, Very High-Oleic, Runner-Type Cultivar.**
  - **Flat Runner Growth Habit with Medium Maturity.**
  - **Very High Oleic to Linoleic Fatty Acid Ratio.**
  - **High Percentage of Total Sound Mature Kernel (TSMK) Grade.**
  - **Good Performance and Stability across Many Different Environments.**
  - **Excellent for the High-Oleic Market Trade.**
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# GEORGIA-22MPR

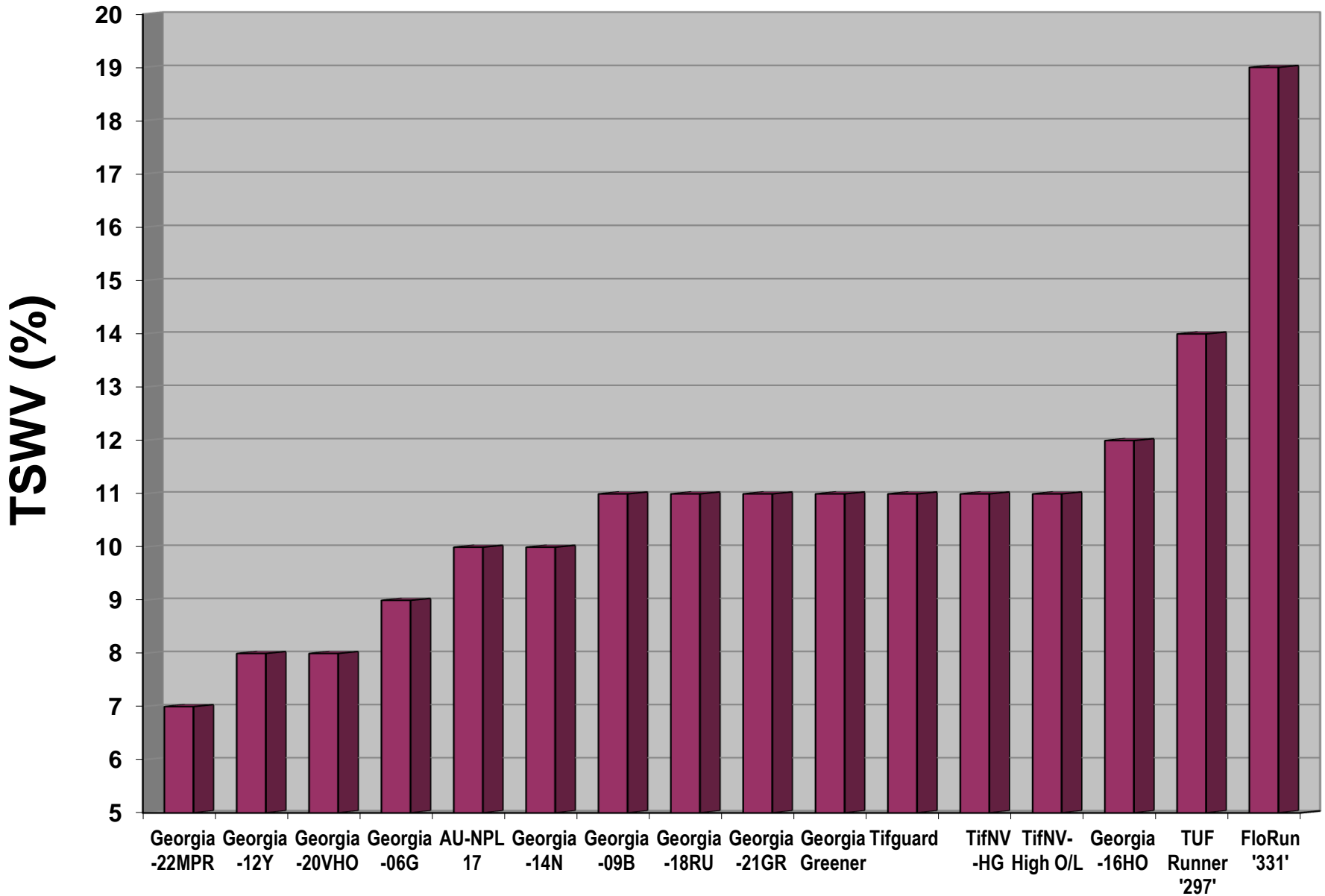
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- \* **New High-Yielding, Multiple-Pest-Resistant, High-Oleic, Runner-Type Cultivar**
  - \* **Intermediate Runner Growth Habit with Medium-Late Maturity and Dark Green Leaf Color.**
  - \* **High-Level Resistance to Root-Knot Nematode, Tomato Spotted Wilt Virus, and Potato Leafhopper.**
  - \* **High-Oleic Fatty-Acid Ratio.**
  - \* **Very Good Performance and Stability across Many Different Environments.**
  - \* **Excellent Peanut Cultivar for the High-Oleic Runner Market in Field Areas with High RKN Populations.**
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**RESULTS:**

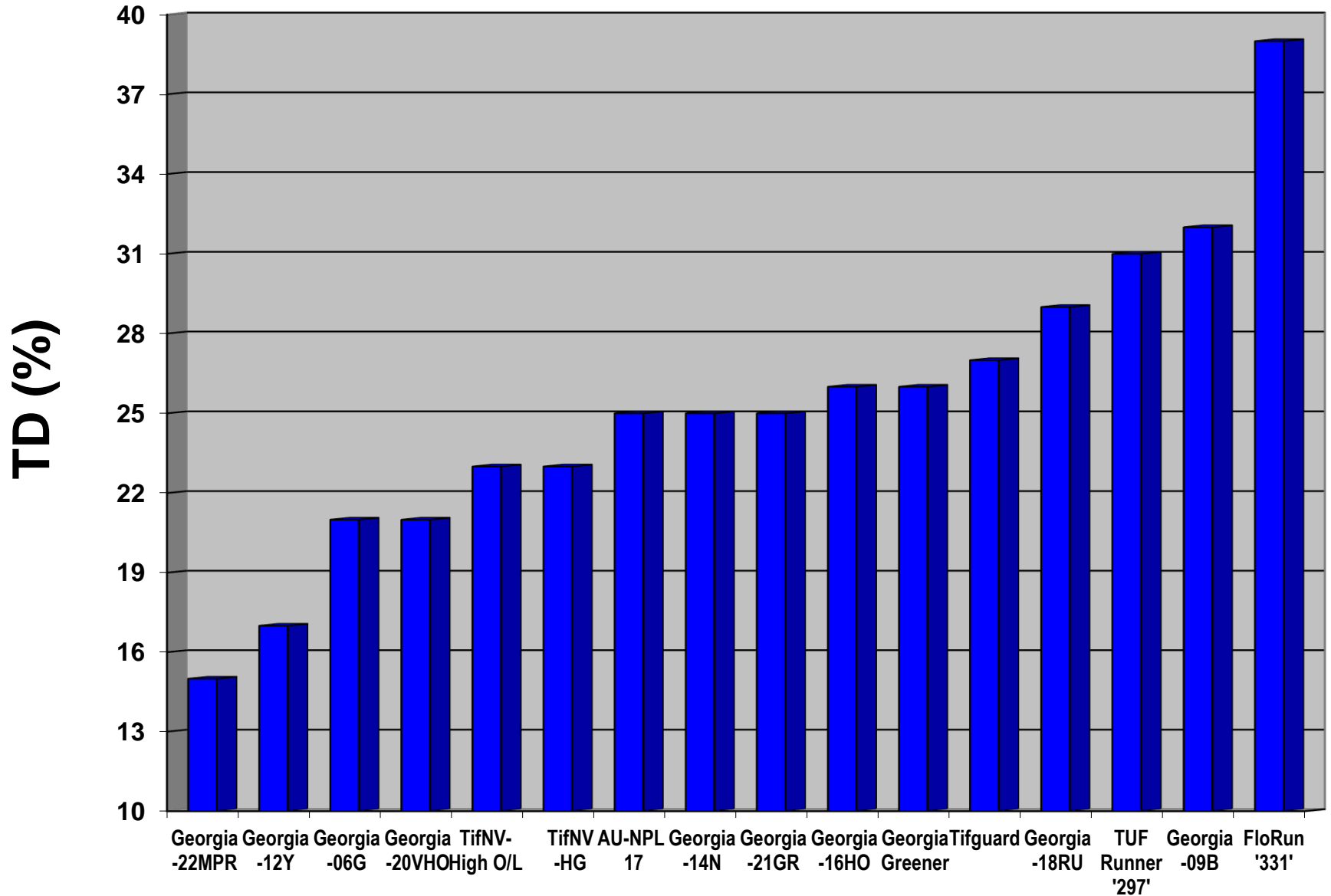


# THREE-YEAR AVERAGE TOMATO SPOTTED WILT VIRUS INCIDENCE OF 16 RUNNER-TYPE PEANUT VARIETIES AT MULTILOCATIONS IN GEORGIA, 2021-23.

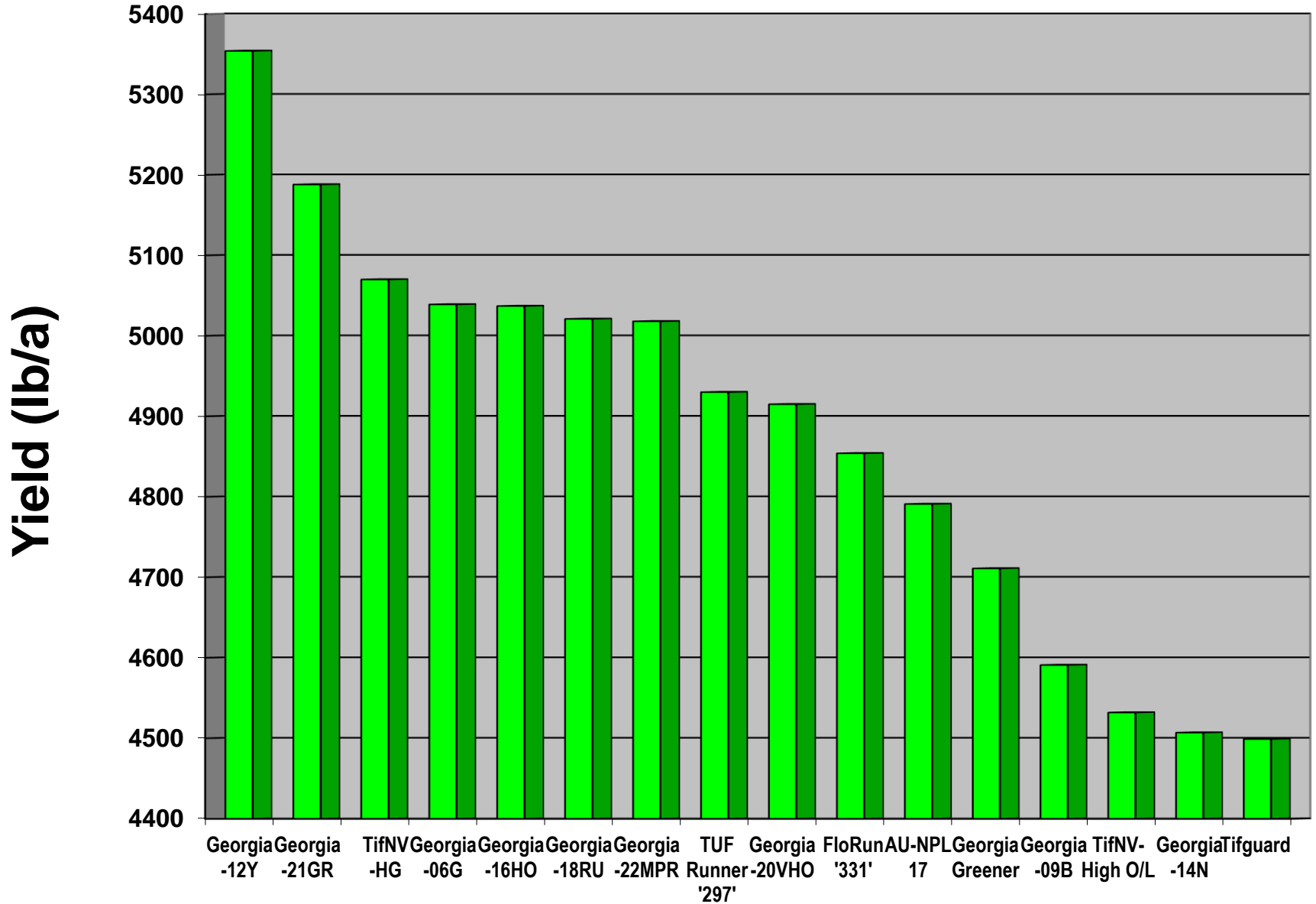




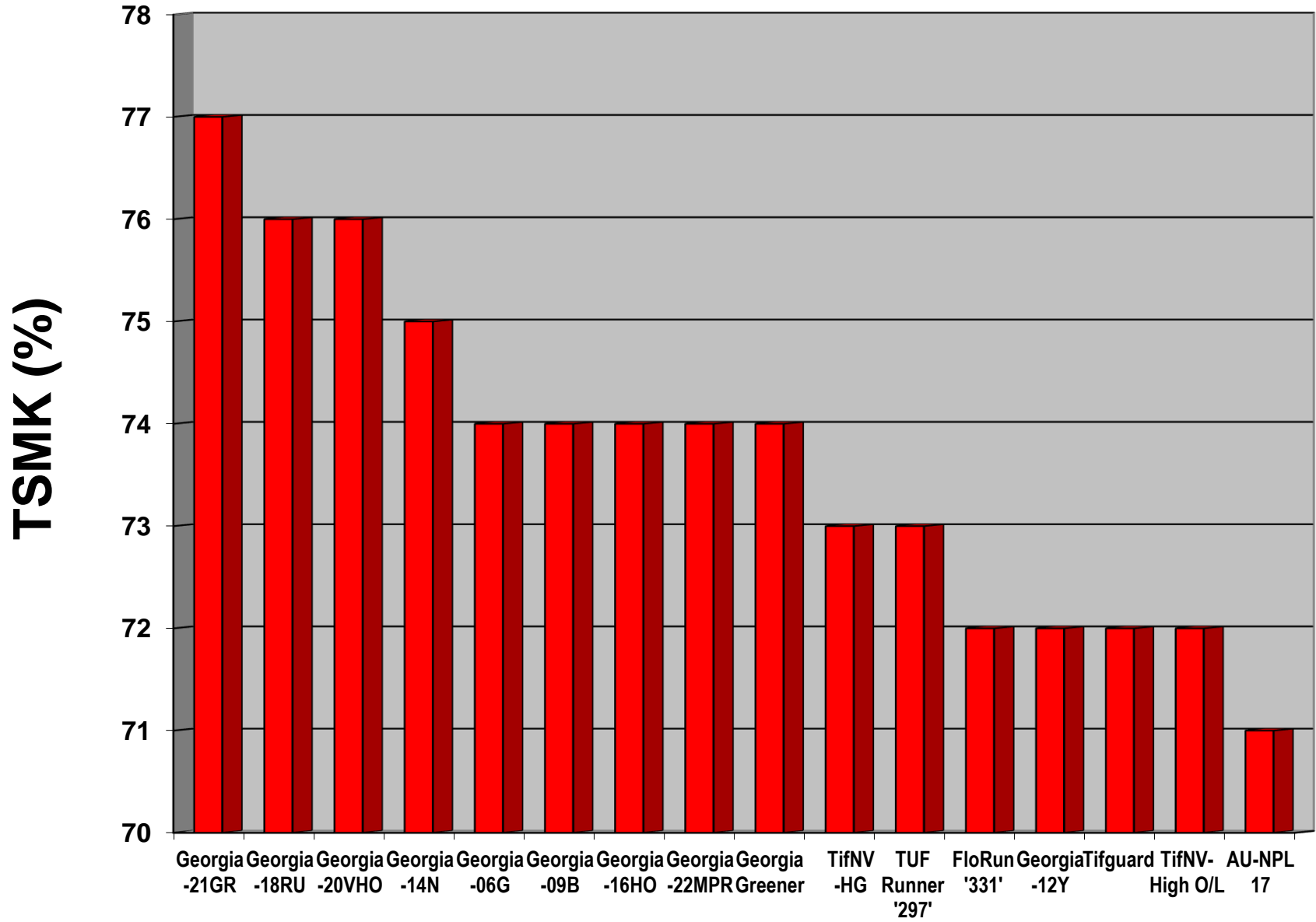
# THREE-YEAR AVERAGE TOTAL DISEASE INCIDENCE OF 16 RUNNER-TYPE PEANUT VARIETIES AT MULTILOCATIONS IN GEORGIA, 2021-23.



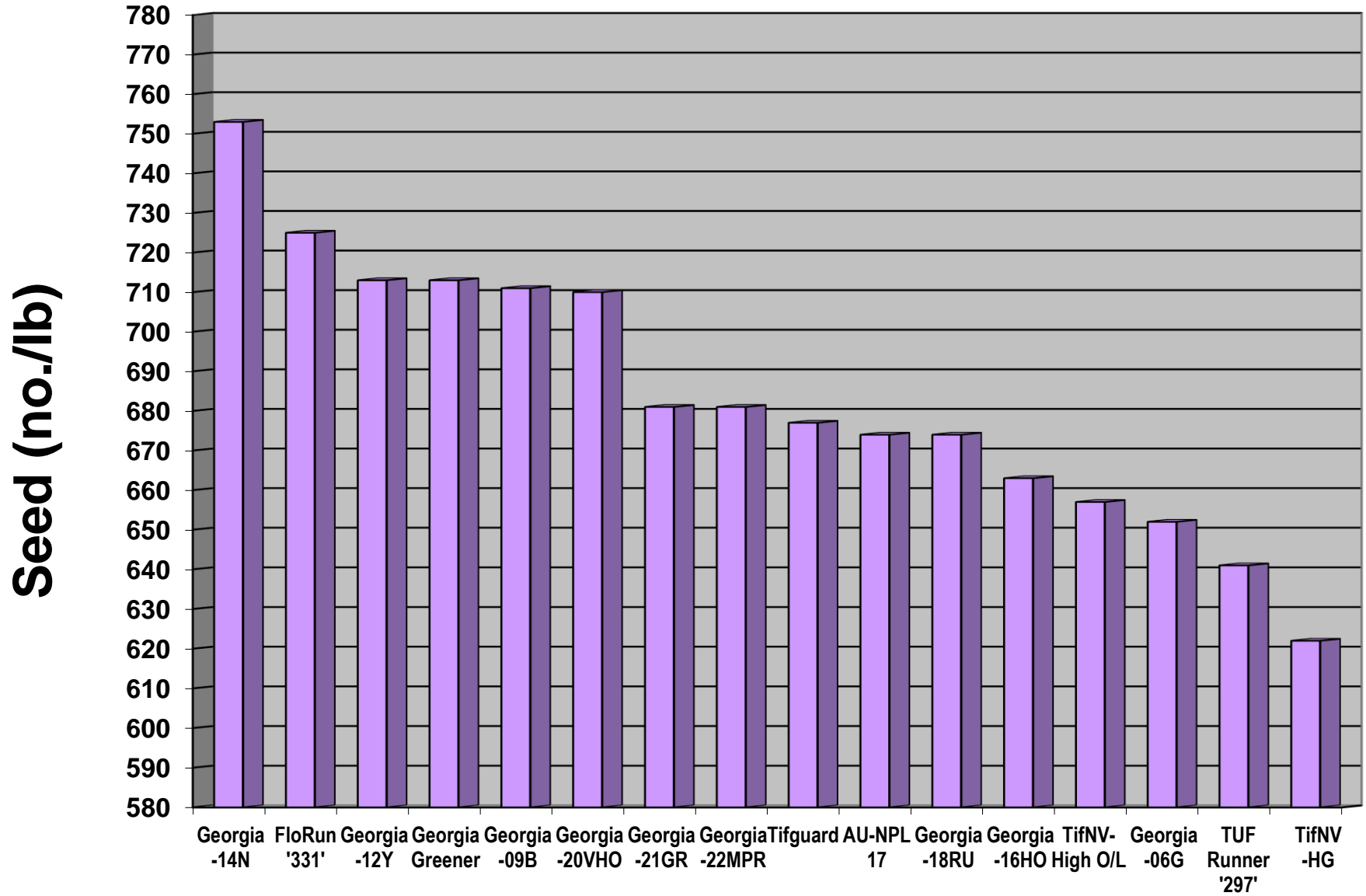
**THREE-YEAR AVERAGE POD YIELD OF 16 RUNNER-TYPE PEANUT VARIETIES AT MULTILOCATIONS IN GEORGIA, 2021-23.**



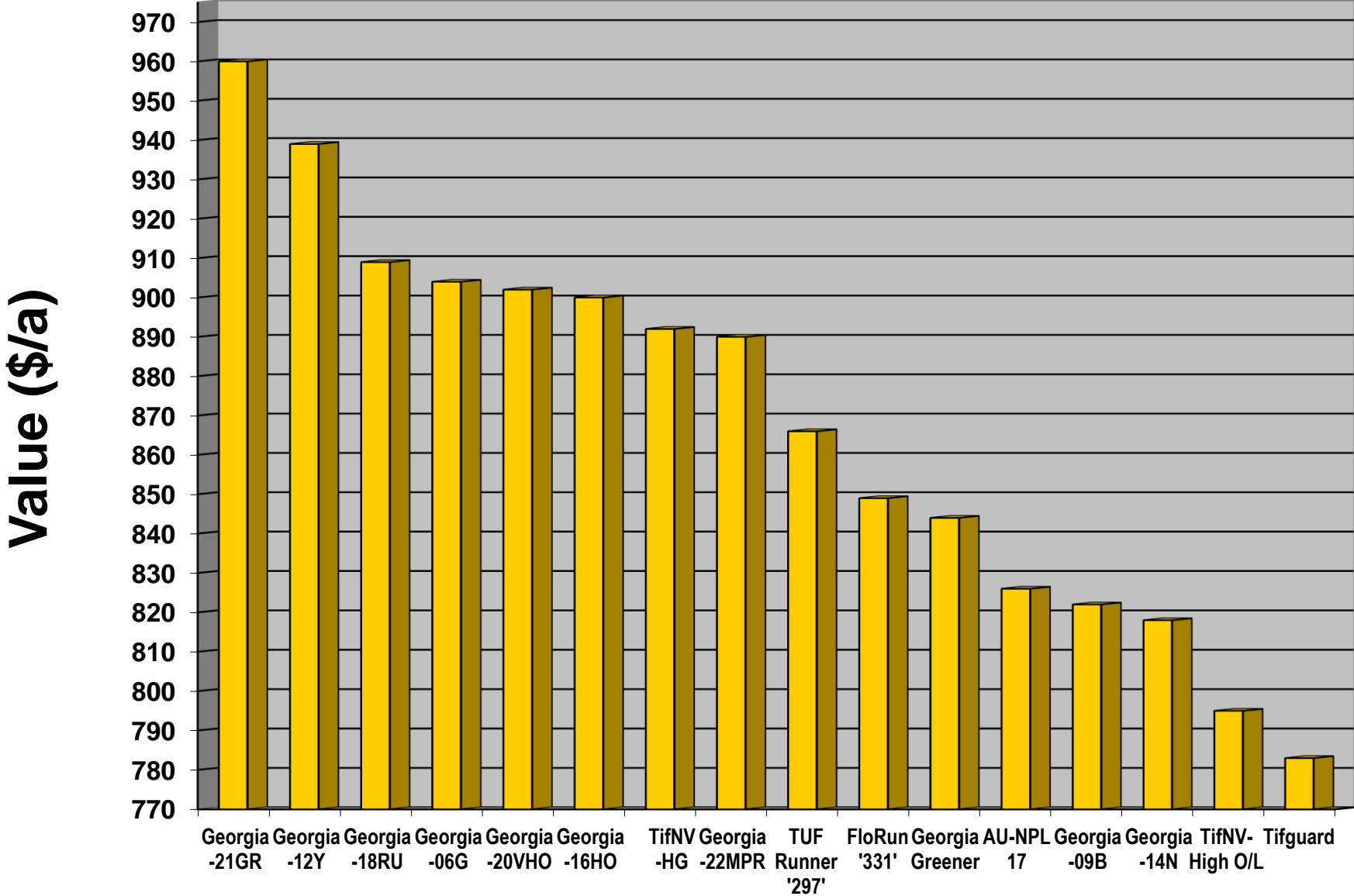
**THREE-YEAR AVERAGE TOTAL SOUND MATURE KERNEL GRADE OF 16 RUNNER-TYPE PEANUT VARIETIES AT MULTILOCATIONS IN GEORGIA, 2021-23.**



**THREE-YEAR AVERAGE SEED COUNT OF 16 RUNNER-TYPE PEANUT VARIETIES AT MULTILOCATIONS IN GEORGIA, 2021-23.**



# THREE-YEAR AVERAGE DOLLAR VALUE OF 16 RUNNER-TYPE PEANUT VARIETIES AT MULTILOCATIONS IN GEORGIA, 2021-23.



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**THANK YOU**

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