

# **Survey of Peanut Farmer Practices used to Protect Peanut from Injury Caused by Thrips in the Virginia-Carolina Region**

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# 2024 Grower Meeting Survey

## **Focus:**

Thrips management

## **Reason:**

Thrips injury can reduce peanut yield

Resistance to imidacloprid

Resistance to acephate

Fungicide and herbicide use survey  
completed several years ago

## 2024 Peanut Grower Meeting Survey

Acreage \_\_\_\_\_

Estimated yield per acre \_\_\_\_\_

Circle your answer to the following questions:

What market type do you grow?                      Runner    Virginia

**Circle the in-furrow insecticide you used for thrips control over the past decade (best guess will work)**

2023	AgLogic(Temik)	Imidacoprid (Admire Pro or generics)	Phorate (Thimet)	Vydate	Orthene (Acephate)
2022	AgLogic(Temik)	Imidacoprid (Admire Pro or generics)	Phorate (Thimet)	Vydate	Orthene (Acephate)
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**Do you routinely apply Acephate (Orthene) to peanuts after peanuts emerge?**

No Yes

**Do you feel like thrips have become more or less difficult to control over the past decade?**

More difficult Less difficult No difference

**What percent of your acreage had visible signs of tomato spotted wilt?**

0 10 20 30 40 50 60 70 80 90 100

**If you had freeze damage in 2023, how many hours separated digging and when the frost or freeze occurred?**

0 24 48 72 96 120

**Did you have any burrower bug damage in 2023?**

No Yes

# Virginia-Carolina Region

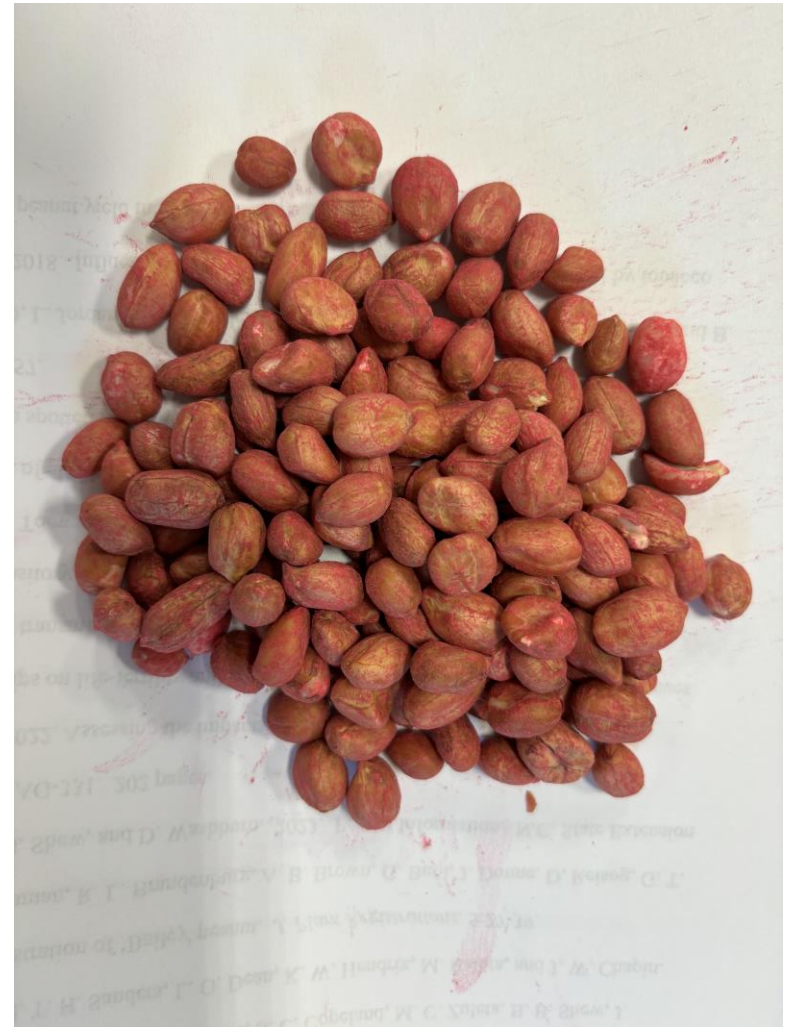
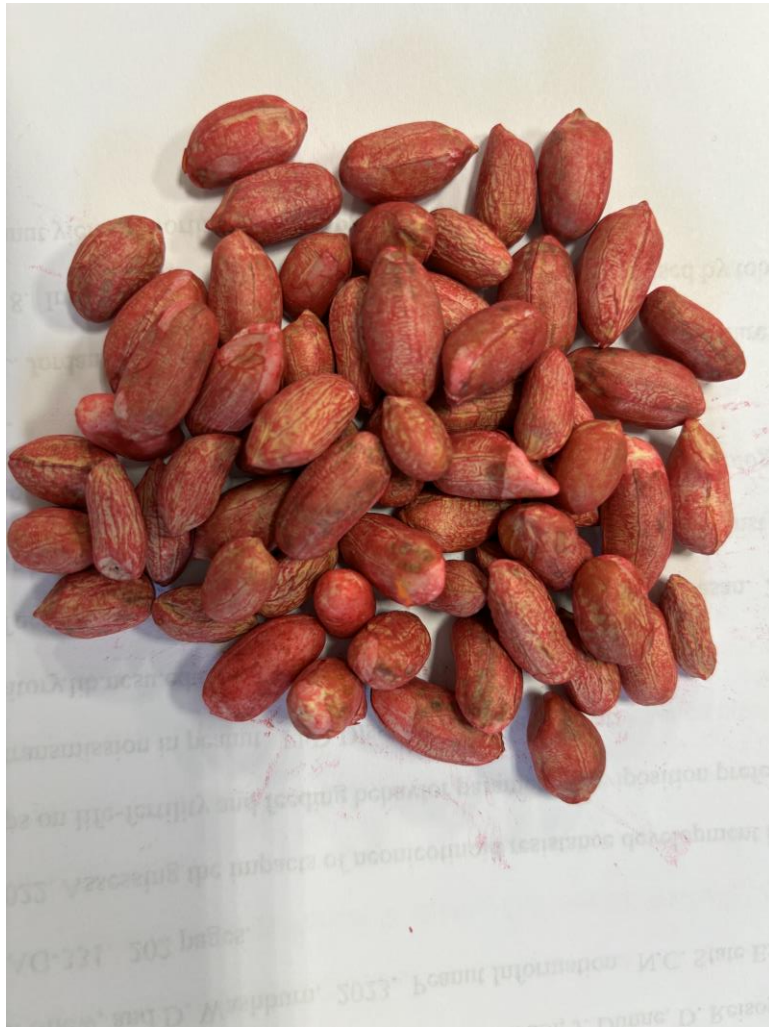
## *Acres represented*

North Carolina – 54,415 acres (~43% of acreage)  
(150 surveys)

Virginia – 9,746 acres (~37% of acreage)  
(41 surveys)

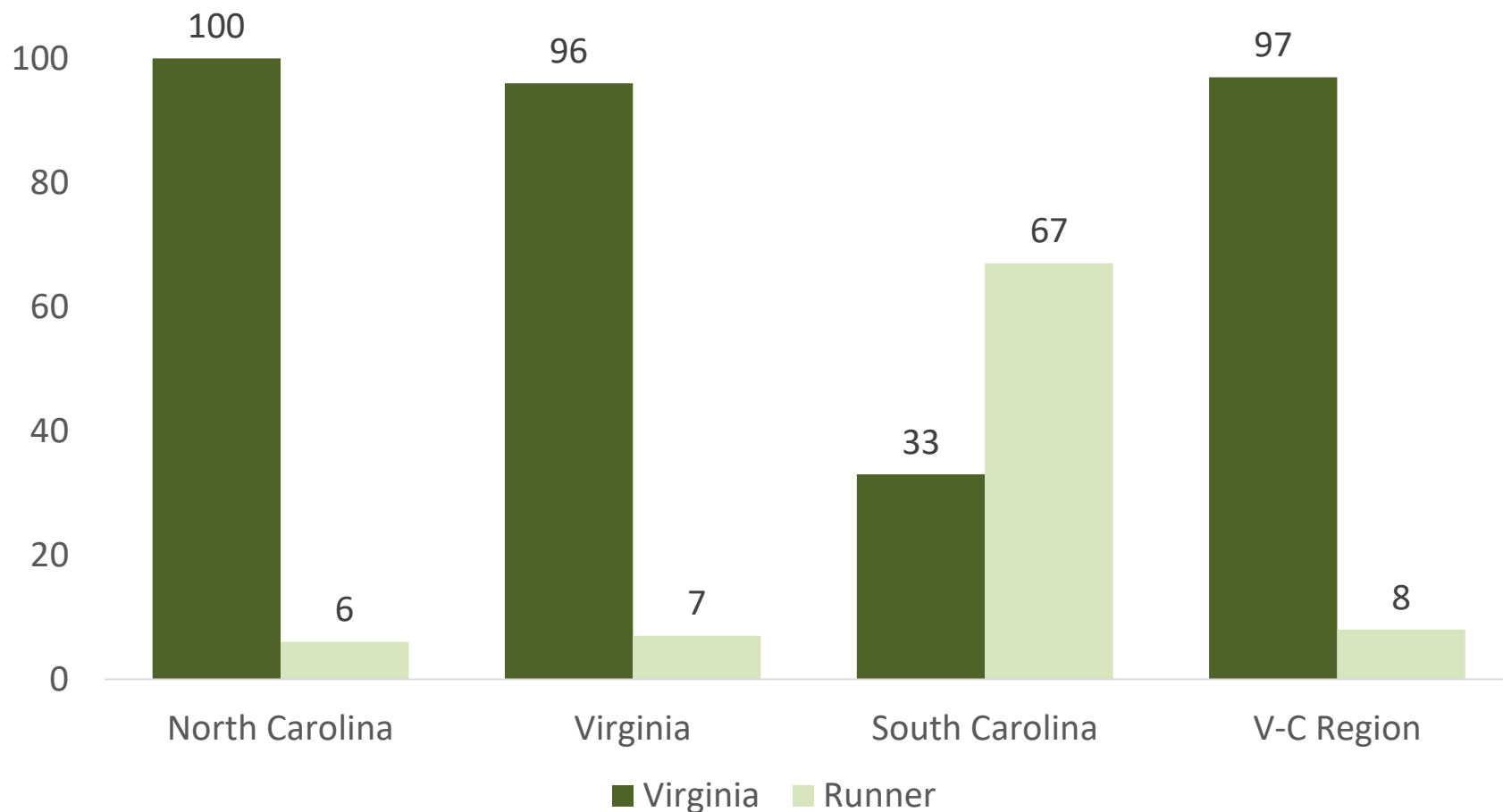
South Carolina – 1,210 acres (6 surveys)

\*Survey numbers will not always add up to 100%



# Market Types in 2023

Percent of Growers  
NC (150), VA (41), SC (6)



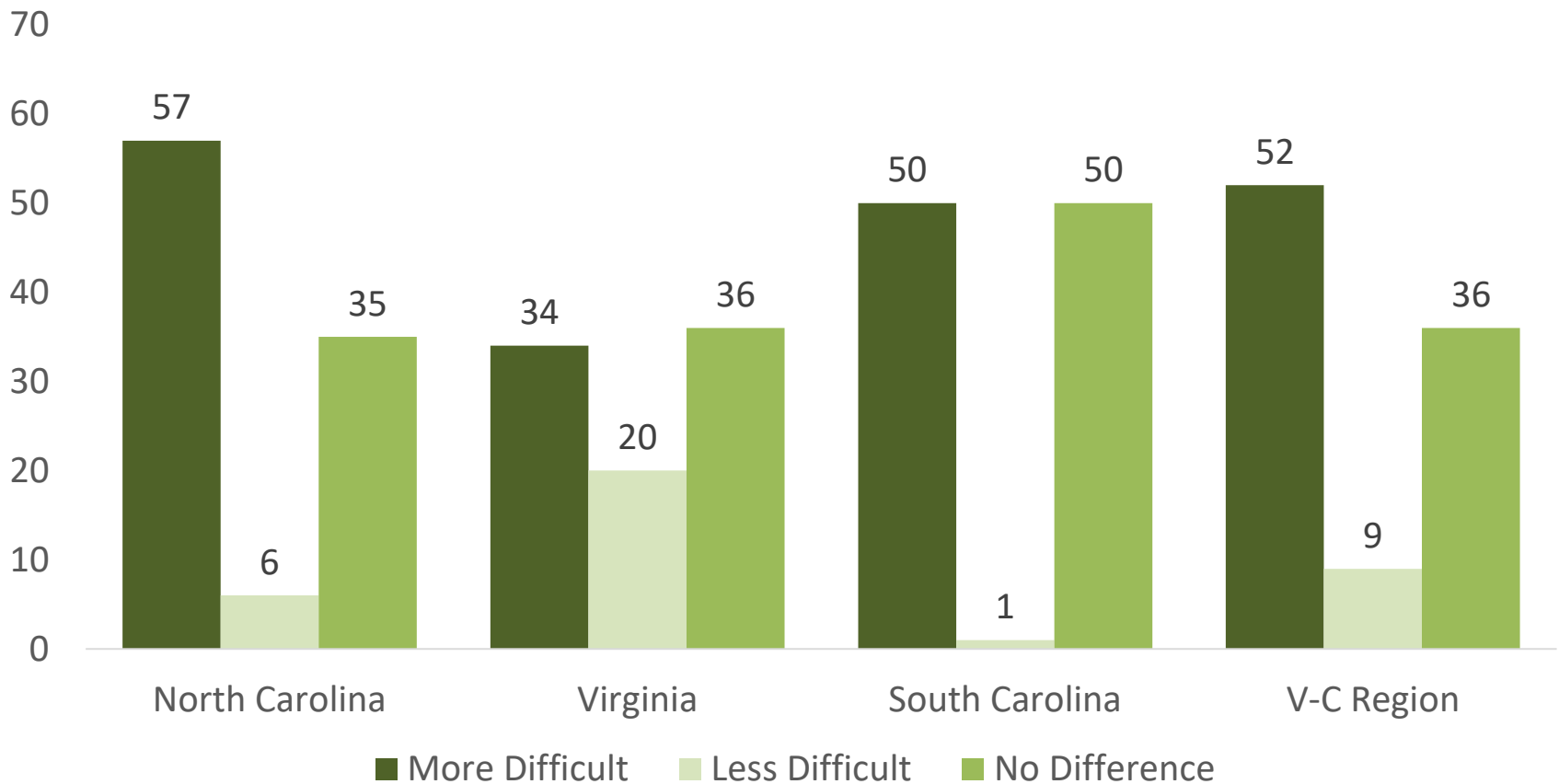




# Change in Ability to Control Thrips

## Percentage of Growers

NC (150), VA (41), SC (6)

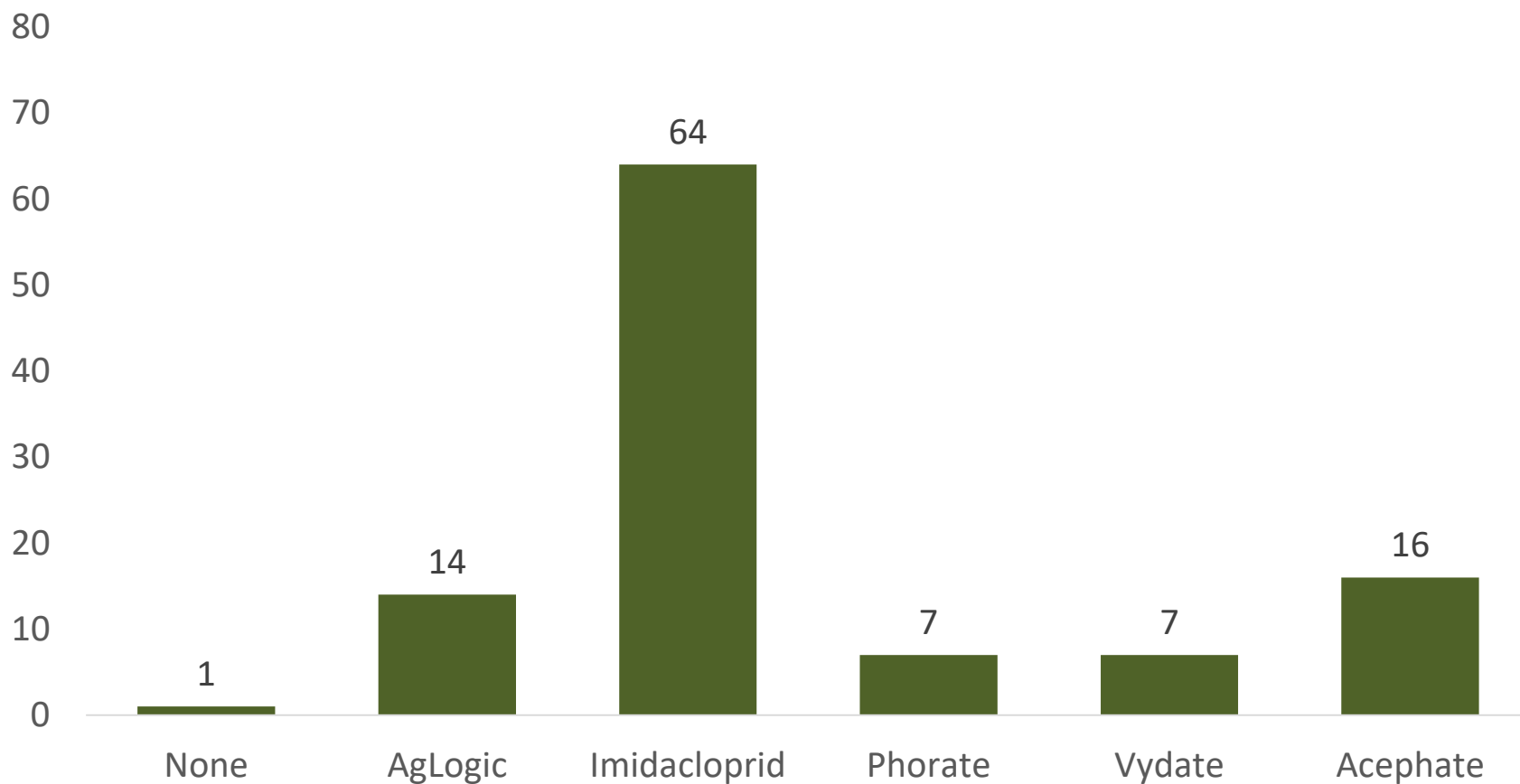






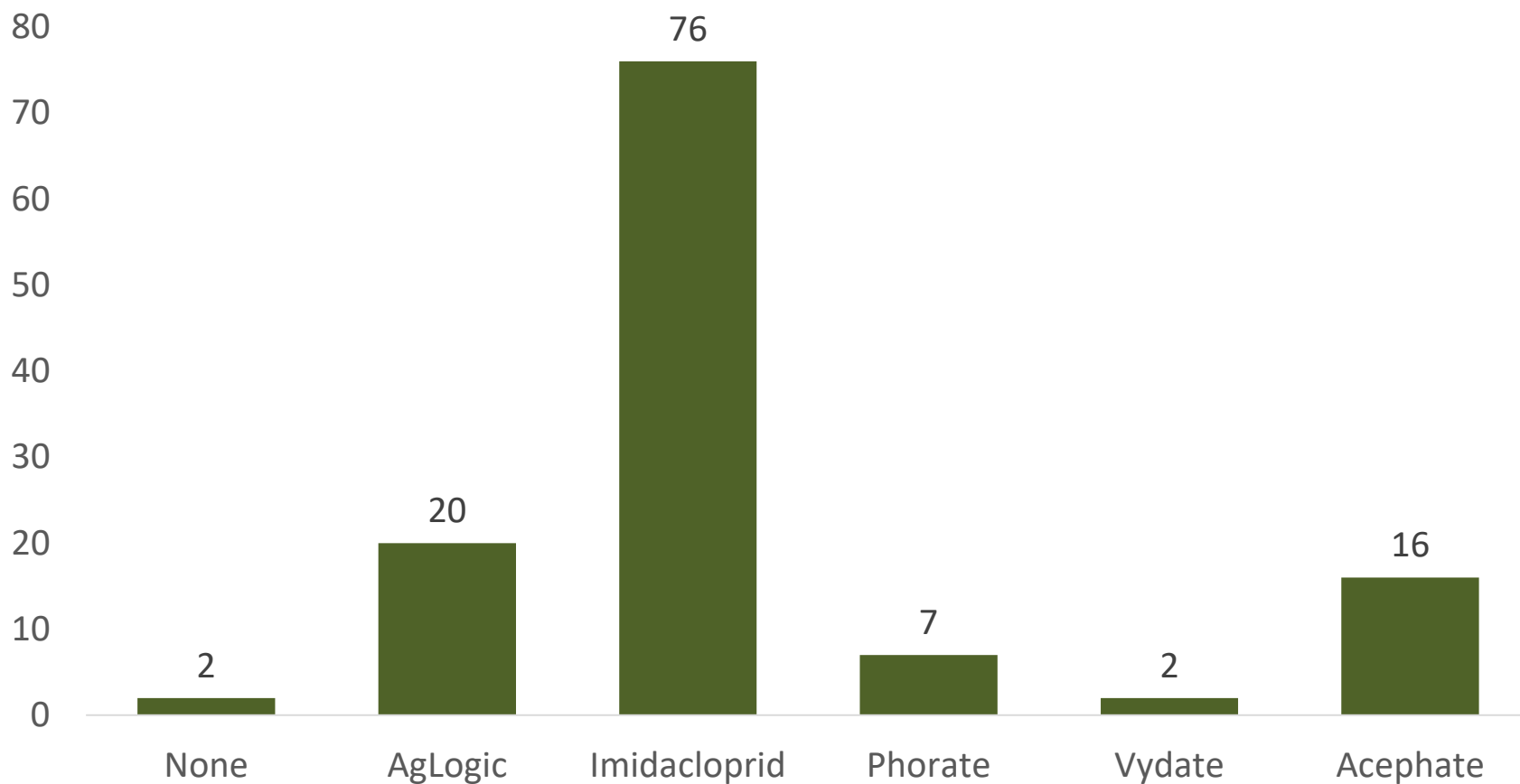
## In-Furrow Insecticides in North Carolina in 2023

### Percentage of Growers (150)



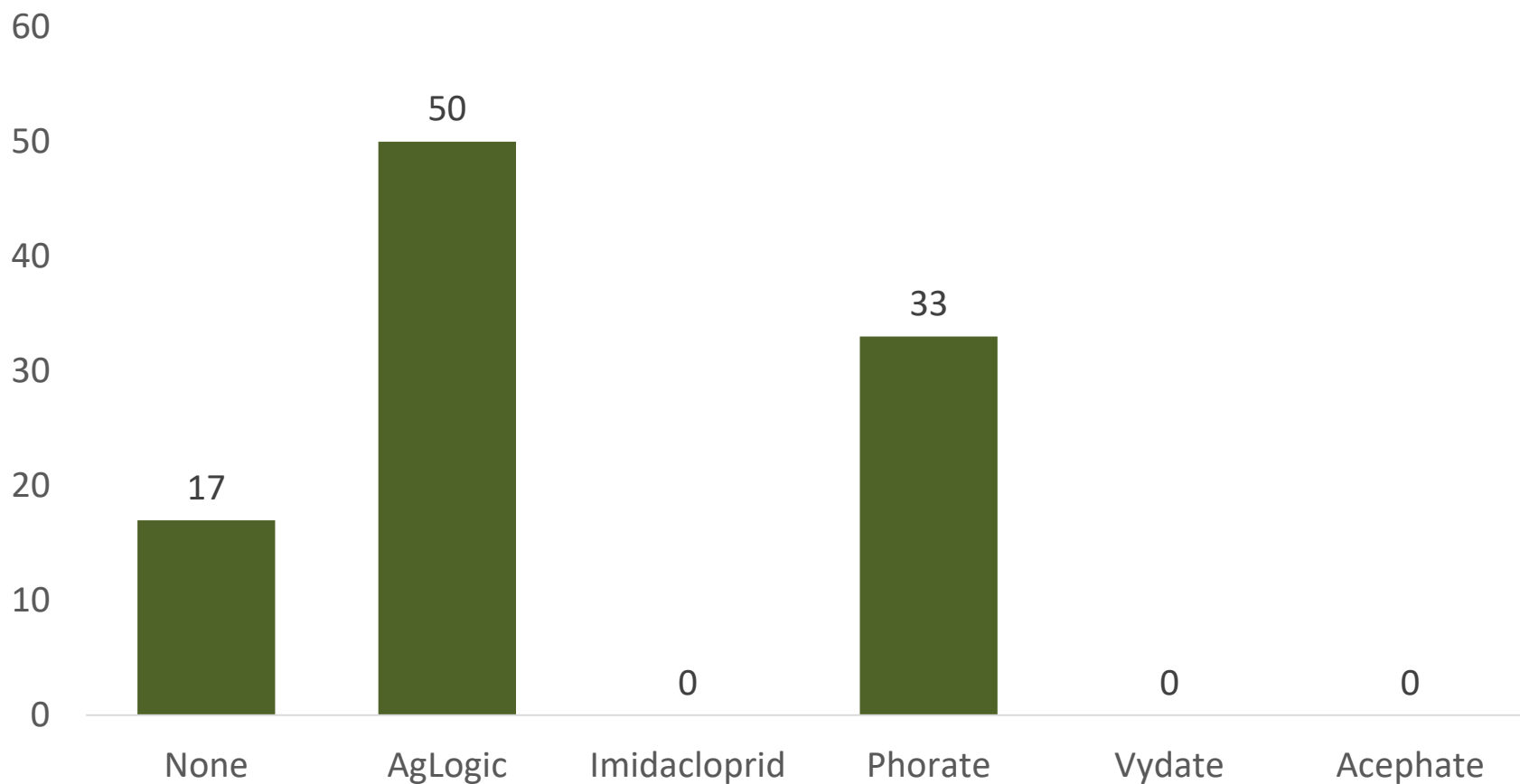
## In-Furrow Insecticides in Virginia in 2023

### Percentage of Growers (41)



## In-Furrow Insecticides in South Carolina in 2023

### Percentage of Growers (6)



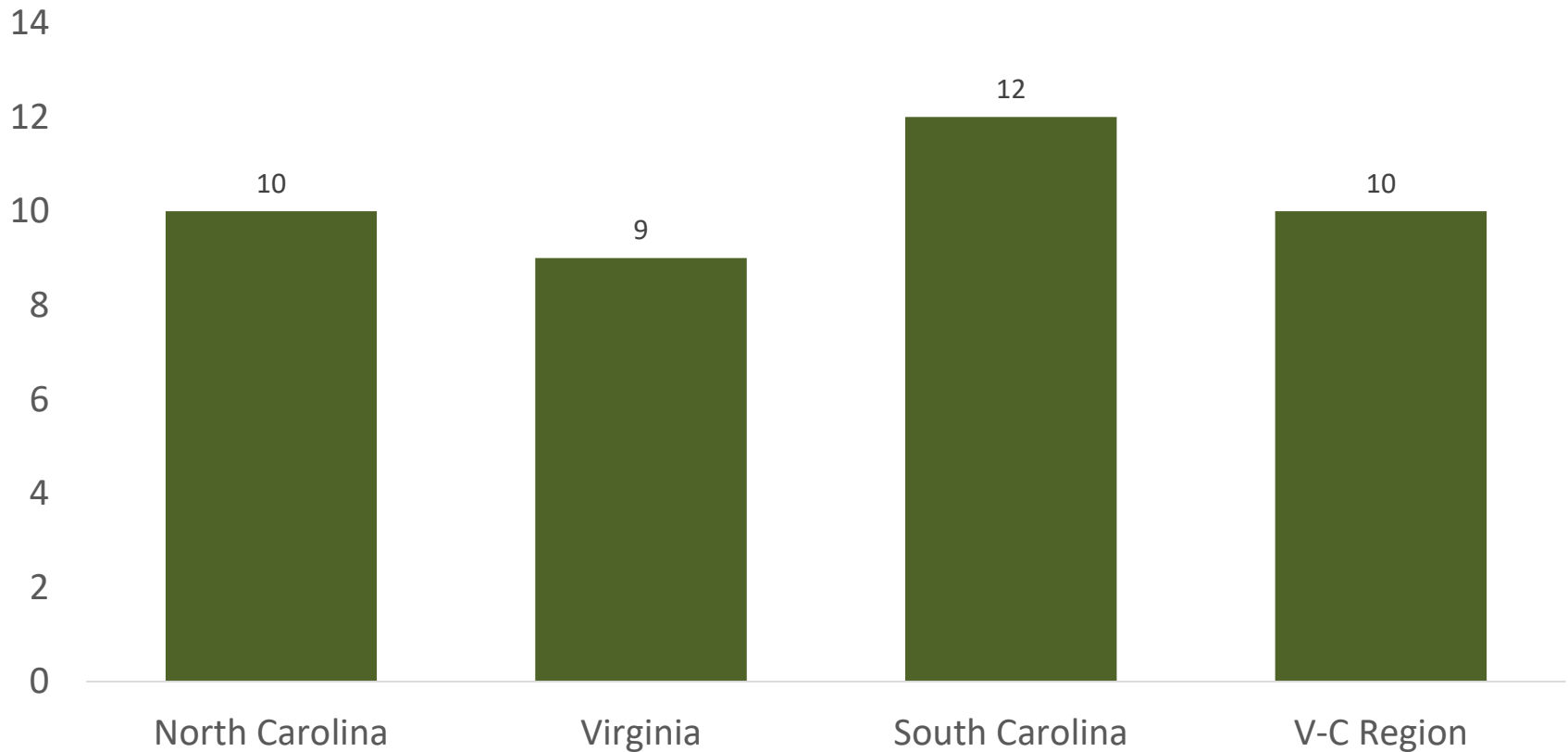




# Incidence of Tomato Spotted Wilt in 2023

## Percentage of Plants with Symptoms of Disease

NC (150), VA (41), SC (6)

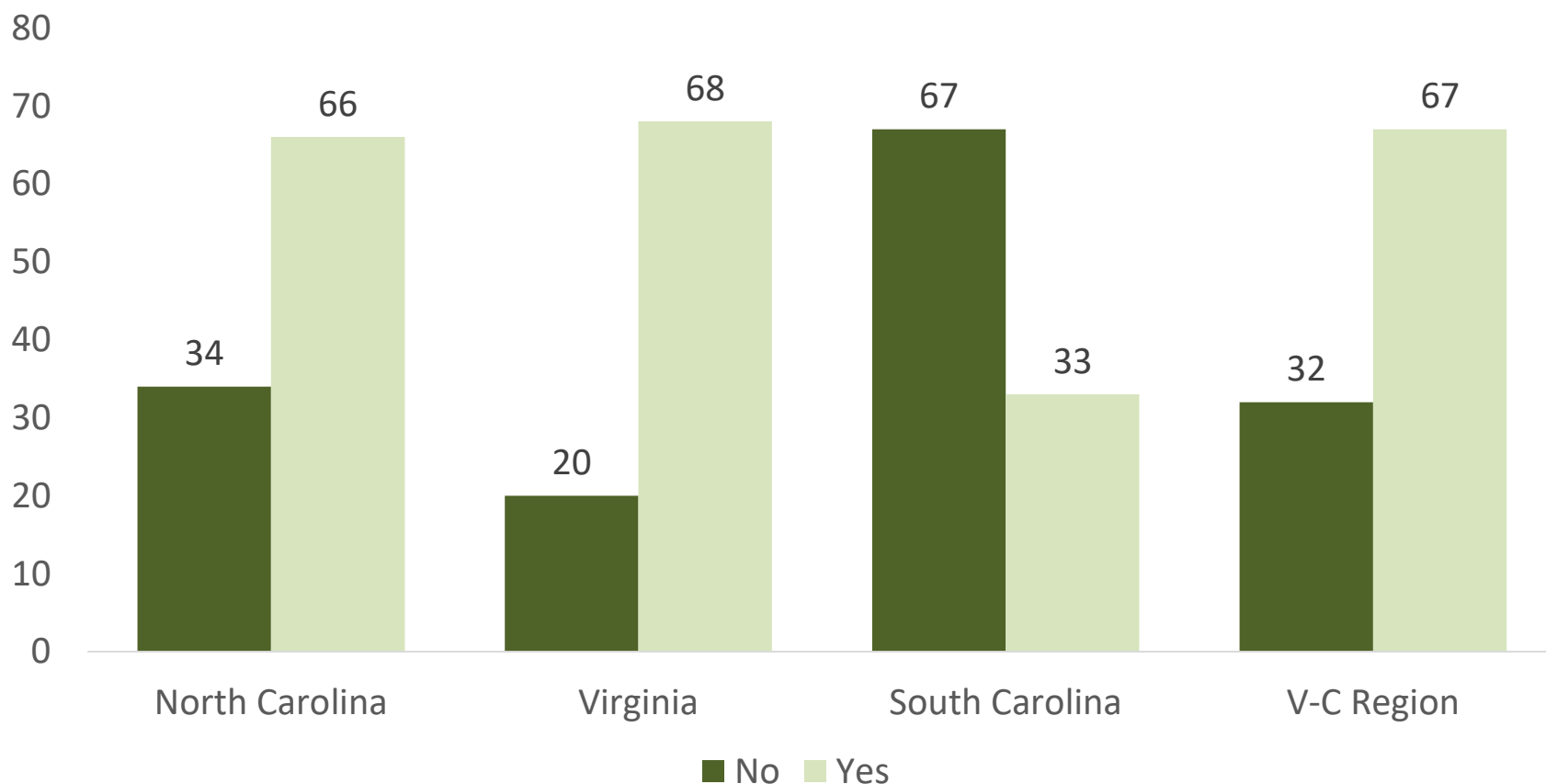




# Routine Postemergence Application of Acephate

## Percentage of Growers

NC (150), VA (41), SC (6)



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2024 Cotton Information

2022 Specialist Winter  
Production Presentations

Calculators and Decision Aids

Cotton Variety Performance Calculator

Cotton Planting Conditions Calculator

Thrips Infestation Predictor for Cotton ...

Deficiency & Injury Symptoms

Diagnosis and Testing

NC State Plant Disease & Insect Clinic

NCDA&CS Agronomic Services – Soil

Testing NCDA&CS Agronomic Services

– Plant Tissue Analysis

Links



# Orthene Resistance Confirmed for Thrips in Cotton: A Suggested Plan Forward

—Written By [Dominic Reisig](#)

Article's Short URL:

[go.ncsu.edu/readext?939174](https://go.ncsu.edu/readext?939174)

**More on:**

[Field Crops](#)

[Pest Alert](#)

[Pest News](#)

**Thrips Foliar Postemergence**

acephate (Orthene) 97 (generics available)	0.375 to 0.75 lb	Do not feed or graze livestock on treated vines. Apply 10 to 50 gal spray solution per acre to foliage. Do not apply more than 4.125 lb per acre (4 lb a.i. per acre) per season.
beta-cyfluthrin (Baythroid XL)	2.8 fl oz	
bifenthrin (Brigade)	2.1 to 6.4 fl oz	Pre-harvest interval of 14 days.
spinetoram (Radiant SC)	1.5 to 3.0 fl oz	Suppression only. See 2(ee) recommendation.

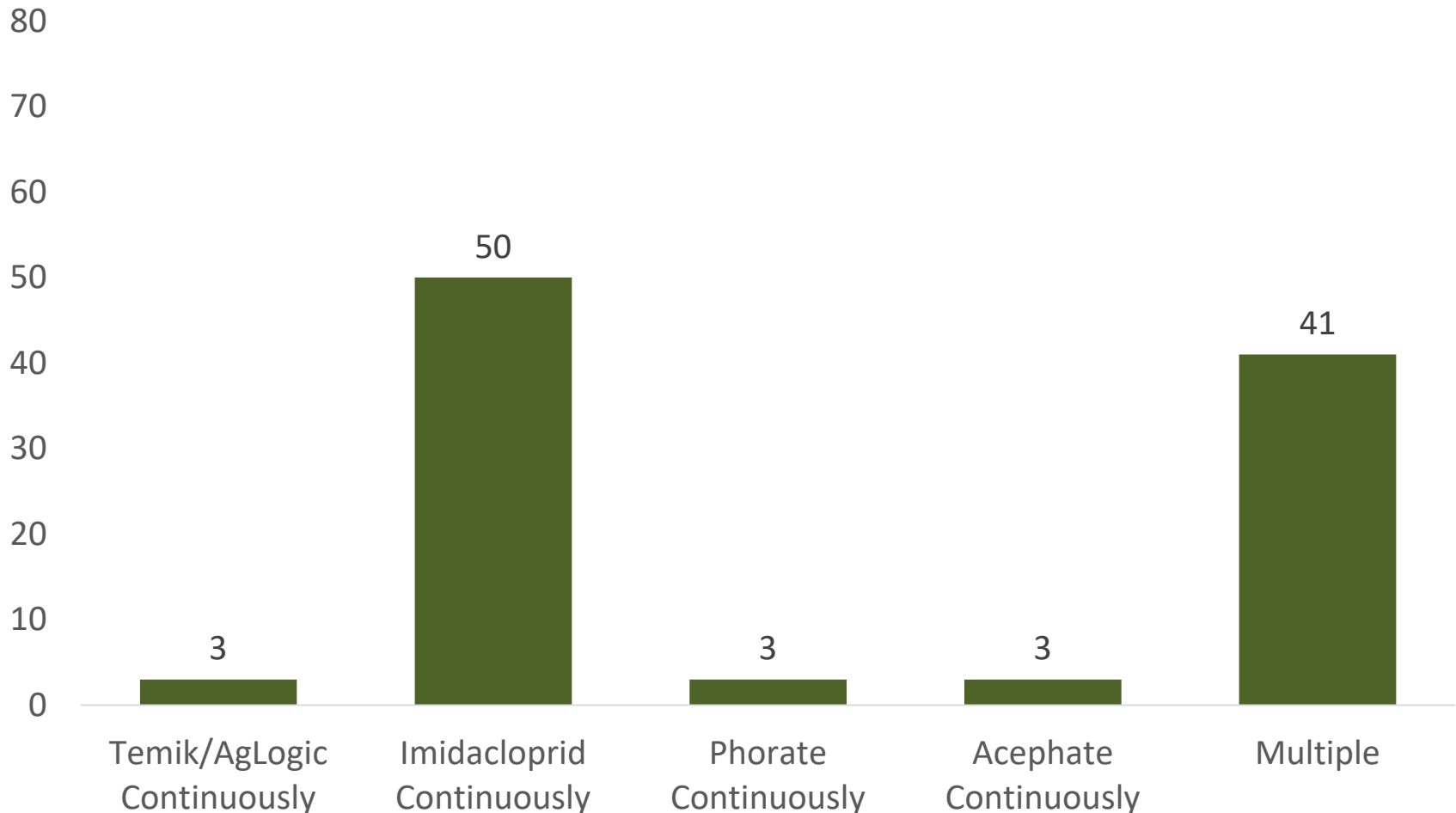
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# In-Furrow Insecticides in North Carolina from 2013-2023

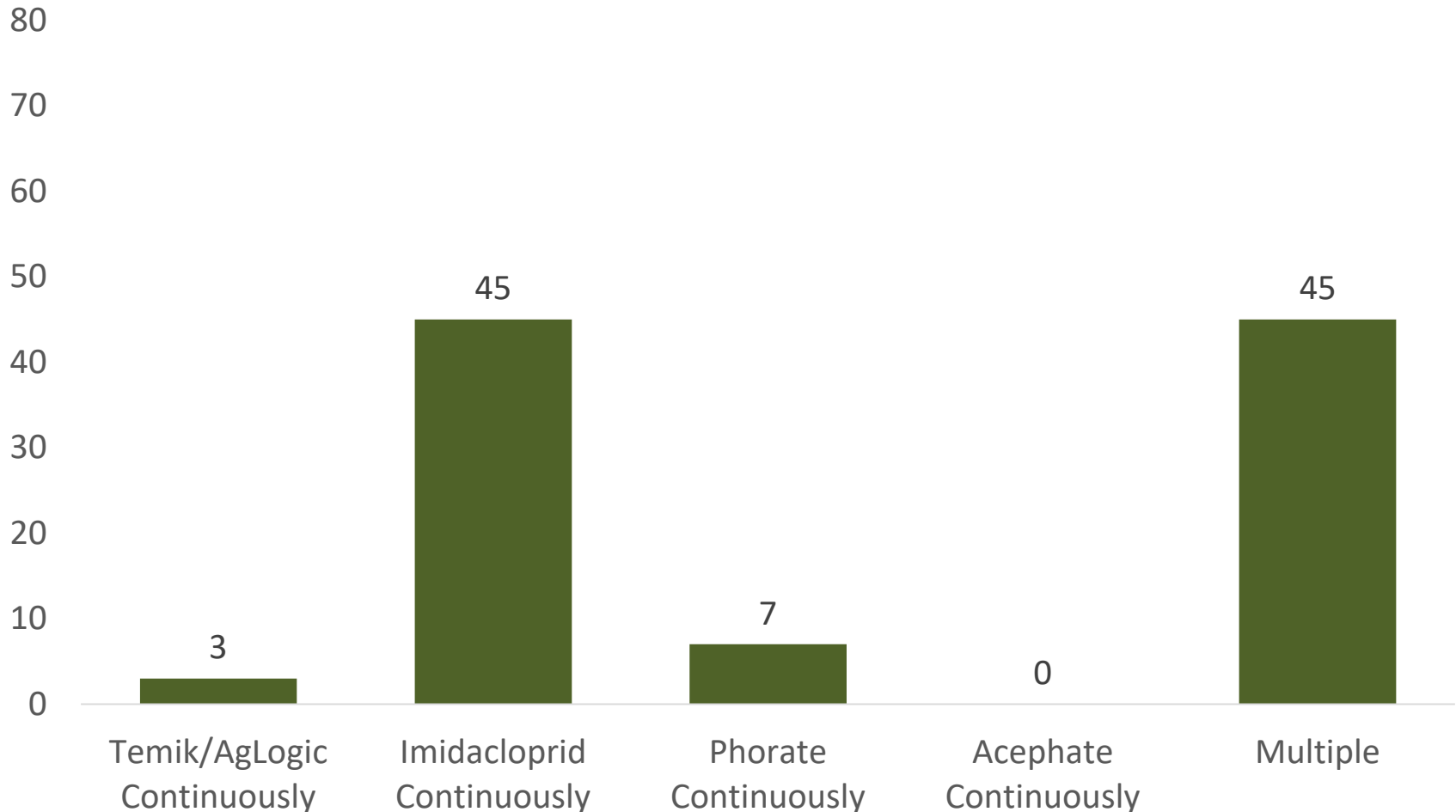
Percentage of Growers (n = 111)

41 different multiple options over the decade



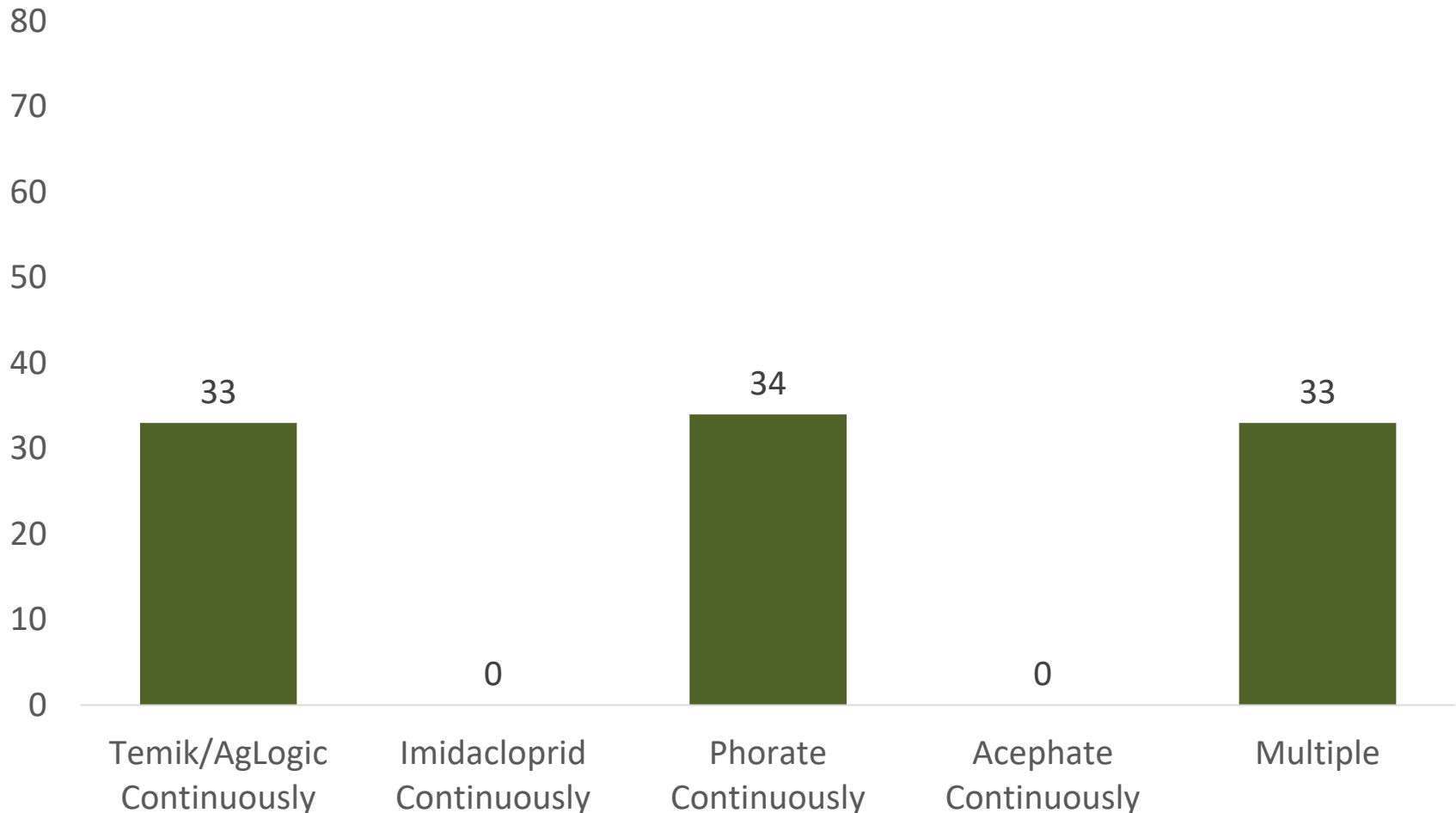
# In-Furrow Insecticides in Virginia from 2013-2023

Percentage of Growers (n = 29)  
13 different multiple options over the decade



# In-Furrow Insecticides in South Carolina from 2013-2023

## Percentage of Growers (n = 3)





**Financial support provided by the North Carolina Peanut Growers Association, Virginia Peanut Growers Association, and South Carolina Peanut Board. Thanks to Cooperative Extension Agents in each state for facilitating the survey.**



**What percentage of your acreage received the following forms of tillage?**

<b>Disk</b>	0	10	20	30	40	50	60	70	80	90	100
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<b>Chisel</b>	0	10	20	30	40	50	60	70	80	90	100
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<b>Moldboard plow</b>	0	10	20	30	40	50	60	70	80	90	100
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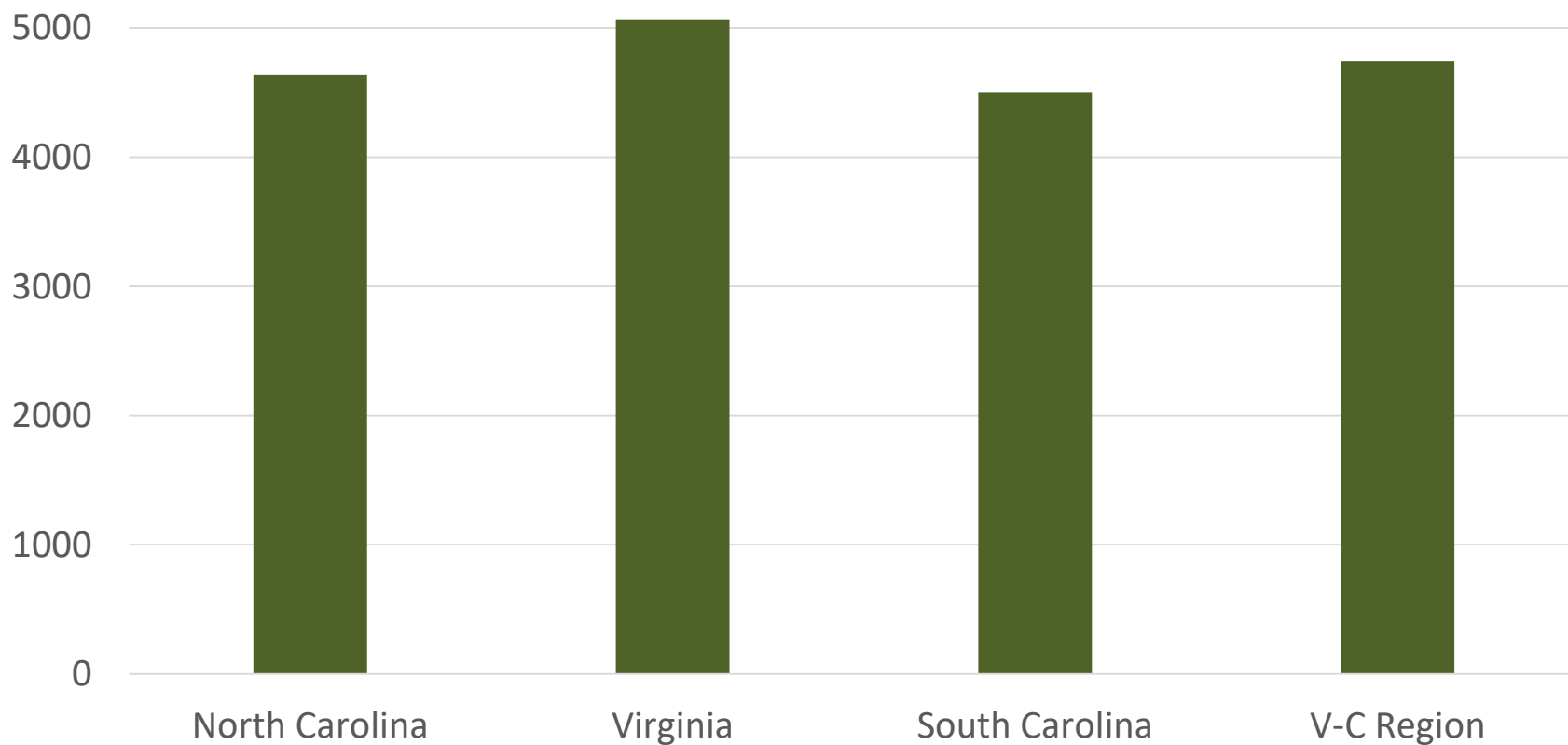
<b>Field cultivate</b>	0	10	20	30	40	50	60	70	80	90	100
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<b>Rip and bed</b>	0	10	20	30	40	50	60	70	80	90	100
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<b>Bed</b>	0	10	20	30	40	50	60	70	80	90	100
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<b>Reduced till</b>	0	10	20	30	40	50	60	70	80	90	100
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## Self-Reported Peanut Yield (pounds per acre) in 2023



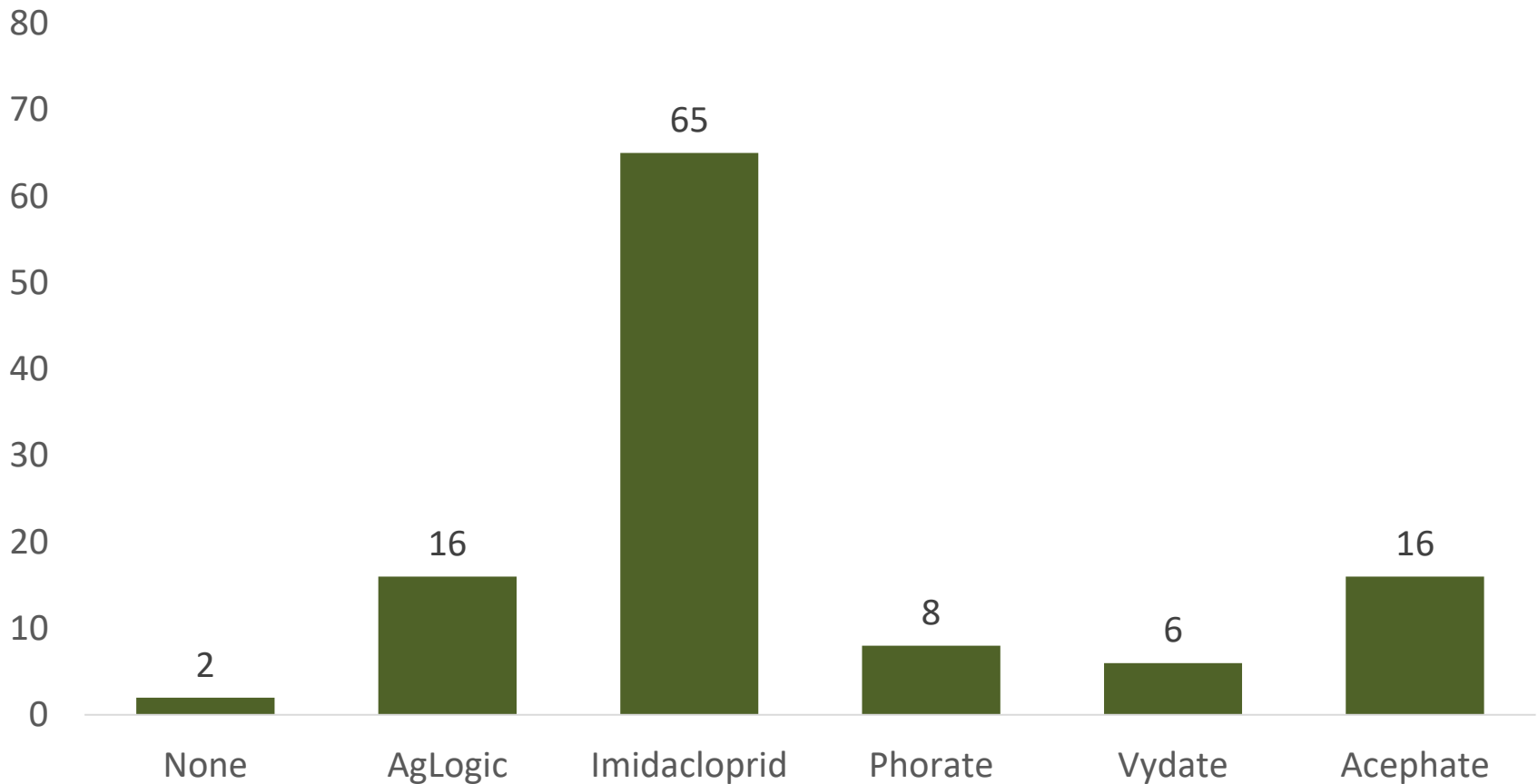
***Table 9-1. Peanut yield (pounds/acre) from 2014 to 2022***

<b>Year</b>	<b>State Average</b>	<b>Grower Meetings Participants</b>	<b>5,000 Pound Club</b>
2014	4,320	4,860 (3,600 to 6,400)	5,660
2015	3,400	4,080 (0 to 5,700)	5,700
2016	3,450	3,840 (0 to 5,740)	5,540
2017	4,030	4,650 (2,300 to 6,530)	5,500
2018	3,780	4,340 (600 to 6,010)	5,470
2019	4,300	4,860 (2,500 to 6,600)	5,720
2020	3,900	4,350 (2,700 to 5,600)	5,420
2021	4,300	4,770 (3,300 to 6,700)	5,698
2022	4,350	4,746 (3,300 to 6,500)	5,620

# In-Furrow Insecticides in V-C Region in 2023

## Percentage of Growers

NC (150), VA (41), SC (6)



CU > CAFLS > Academics > Entomology, Soils, and Plant Science > Insect Fact Sheets > Agriculture > Peanut > Burrower Bug on Peanut

## Burrower Bug on Peanut



*Pangaeus bilineatus* (Say)

**Description:** Adult burrower bugs are oval-shaped and about 1/4 inch long. They are dark brown to black except for the ends of the wings, which form a transparent, silvery diamond shape at the rear of body. Nymphs are smaller, dark brown, and have the same general body shape. Other species of burrower bugs found on peanut have a different appearance, but this description fits the major pest species.

**Biology:** Winter is spent as an adult in peanut fields and other crops. When the soil warms up in March, adults move up in the soil, mate and lay eggs. There are two generations per year in South Carolina peanut. Populations increase during pod fill in August and September. Both adults and nymphs feed on peanut kernels with their needle-like mouthparts. Injury is not noticeable on the hull or seed coat, but shows up as light yellow lesions to dark brown pits on the kernels when the seed coat is removed. Burrower bug feeding causes grade reductions by reducing kernel weight. Severe infestations can result in damaged kernel grade penalties and significant yield loss.

**Management:** Damage is much more likely in reduced tillage production systems and appears to be correlated with drought stress. When fall tillage is used to plant cover crops, damage potential is significantly reduced compared to no-till planting of the cover crop. Chlorpyrifos applied in July controls burrower bug, but the best defense is irrigation or tillage. Volunteer peanuts in corn or cotton rotational crops increase the risk of economic injury on the following peanut crop.



Immature and adult burrower bugs. (J. Chapin)



Burrower bug feeding sites. (J. Chapin)

# Damage from Burrower Bug in 2023

Percentage of Growers  
NC (150), VA (41), SC (6)

