

Arizona Iceberg Lettuce Research Council

Iceberg Lettuce Research Survey
2023

Results presented June 27, 2023

AILRC Research Survey 2023

- 15 on-line responses were collected between September 29, 2022 and April 17, 2023
- 1 response to 2018 link
- 2 duplicate on-line responses (used latest response)
- 0 paper surveys were collected
- 13 usable responses for data sets

AILRC Research Survey 2023

- 13 usable surveys
- 4 industry entities (non-producer)
- 9 iceberg lettuce producer surveys
- 2023 data set for 13 total usable surveys
- 2023 data set for 9 producer only surveys
- 2018 data set for comparison

Survey Categories

1. Areas of Research
2. Diseases and Disorders
3. Soil and Water Management
4. Technology
5. Insects and Nematodes
6. Food Safety
7. Organic
8. Other

Areas of Research

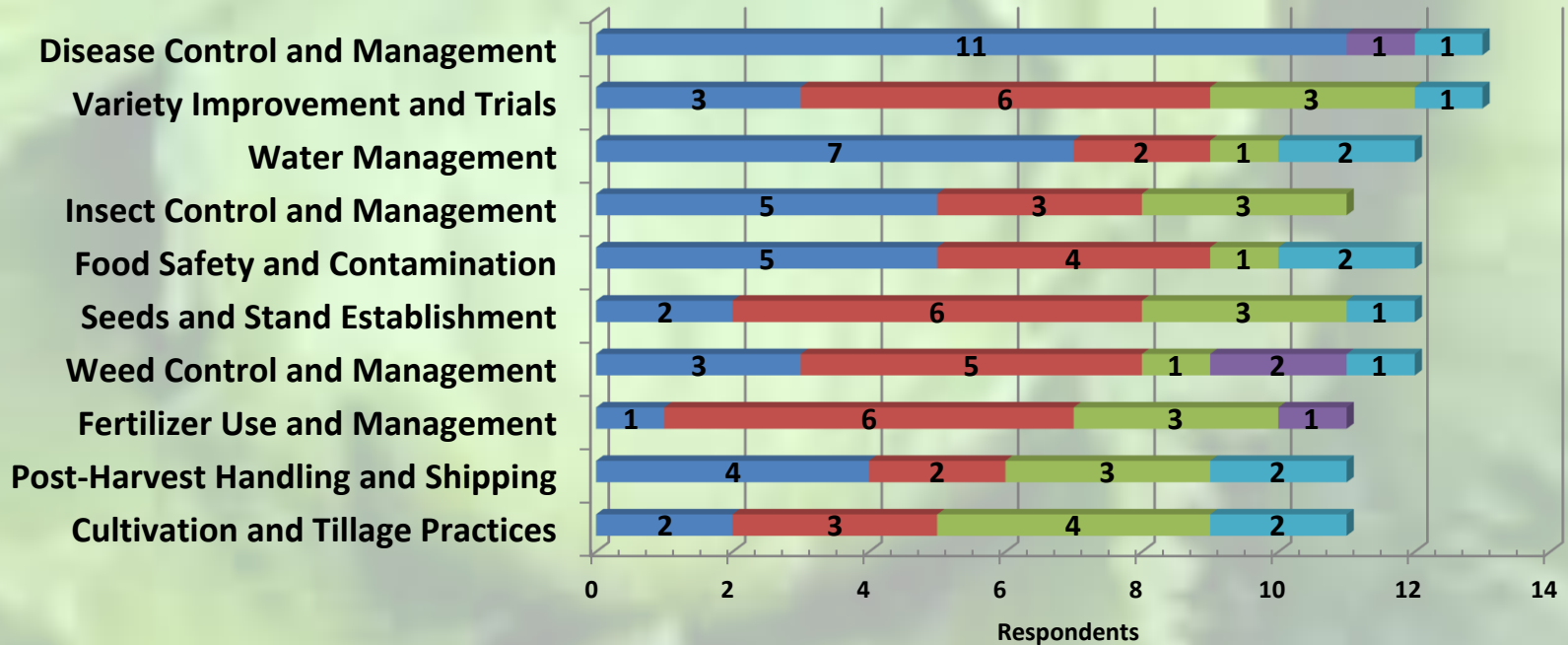
All 2023 Surveys (13)

Priority*

■ 5 - High ■ 4 - Medium High ■ 3 - Medium ■ 2 - Medium Low ■ 1 - Low

High

Low



*Priority ranking based on a weighted average

Areas of Research

2023 Producers Only (9)

■ 5 - High ■ 4 - Medium High ■ 3 - Medium ■ 2 - Medium Low ■ 1 - Low

Priority*

High



Low



*Priority ranking based on a weighted average

Areas of Research

2018 Producers	2023 All	2023 Producers Only
Disease Control and Management	Disease Control and Management	Disease Control and Management
Insect Control and Management	Variety Improvement and Trials	Weed Control and Management
Weed Control and Management	Water Management	Variety Improvement and Trials
Water Management	Insect Control and Management	Seeds and Stand Establishment
Food Safety and Contamination	Food Safety and Contamination	Water Management
Variety Improvement and Trials	Seeds and Stand Establishment	Insect Control and Management
Fertilizer Use and Management	Weed Control and Management	Fertilizer Use and Management
Seeds and Stand Establishment	Fertilizer Use and Management	Food Safety and Contamination
Cultivation and Tillage Practices	Post-Harvest Handling and Shipping	Post-Harvest Handling and Shipping
Post-Harvest Handling and Shipping	Cultivation and Tillage Practices	Cultivation and Tillage Practices

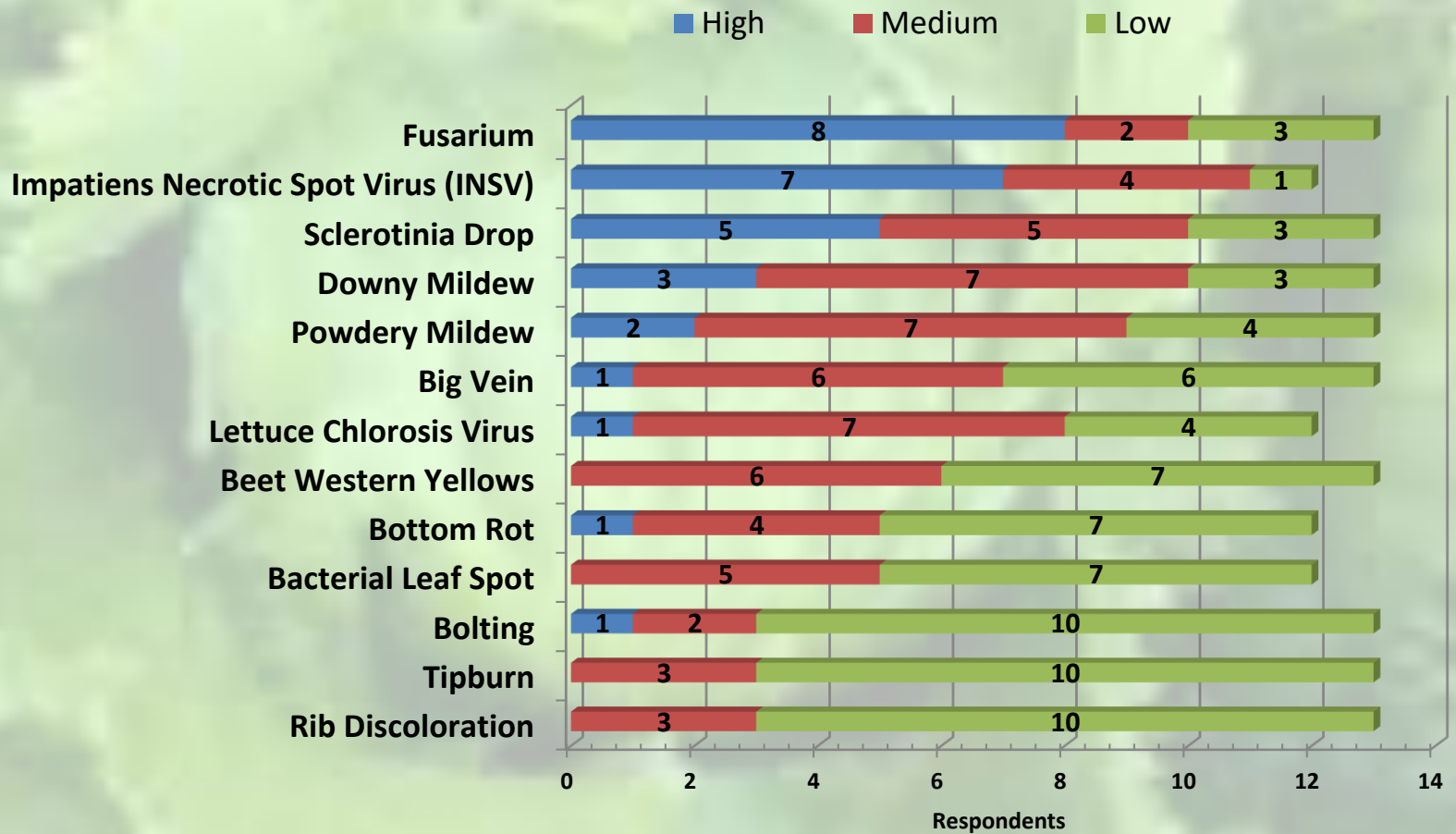
Diseases and Disorders

All 2023 Surveys (13)

Priority*

High

Low



*Priority ranking based on a weighted average

Diseases and Disorders

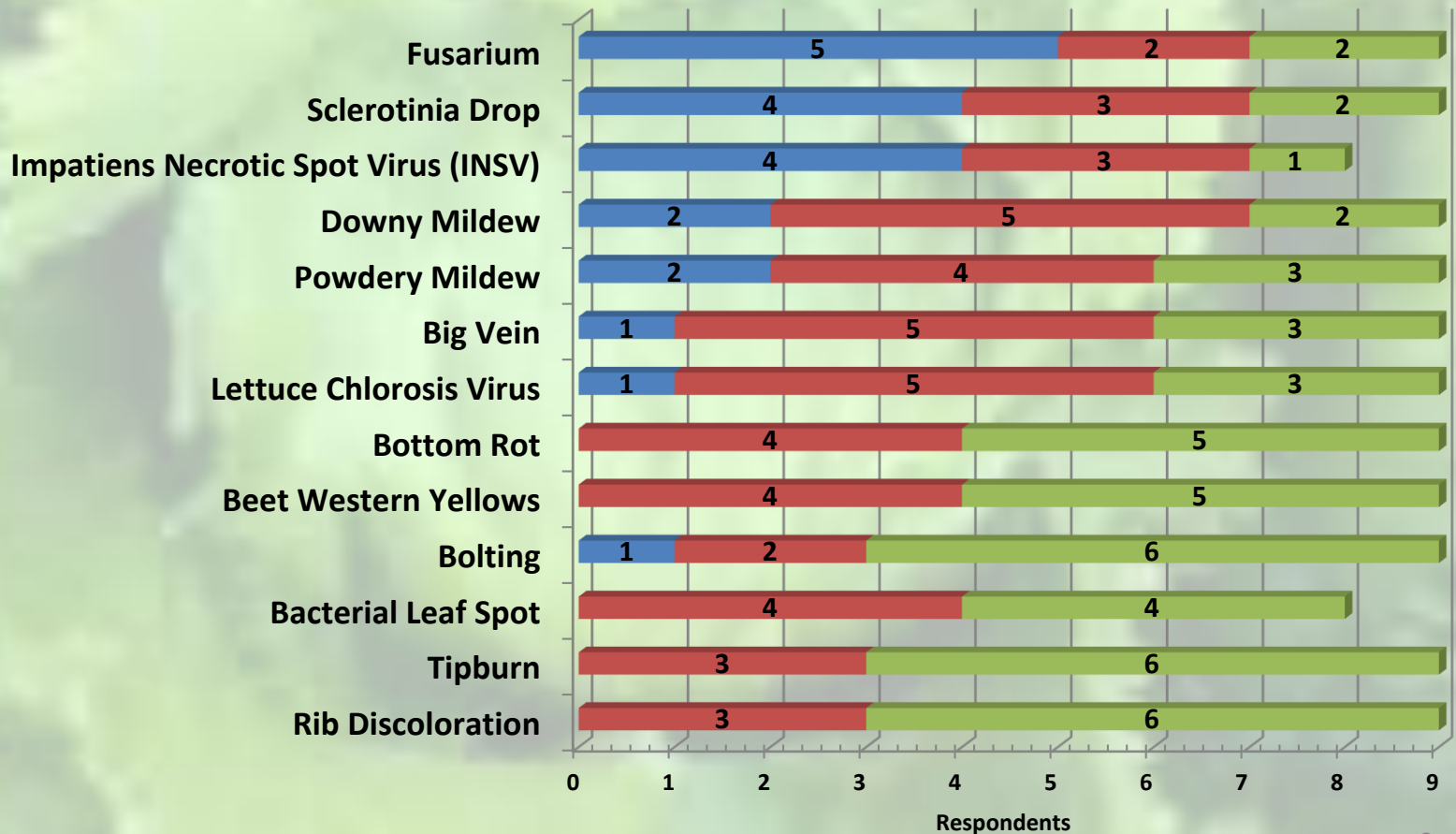
2023 Producers Only (9)

Priority*

High

Low

■ High ■ Medium ■ Low



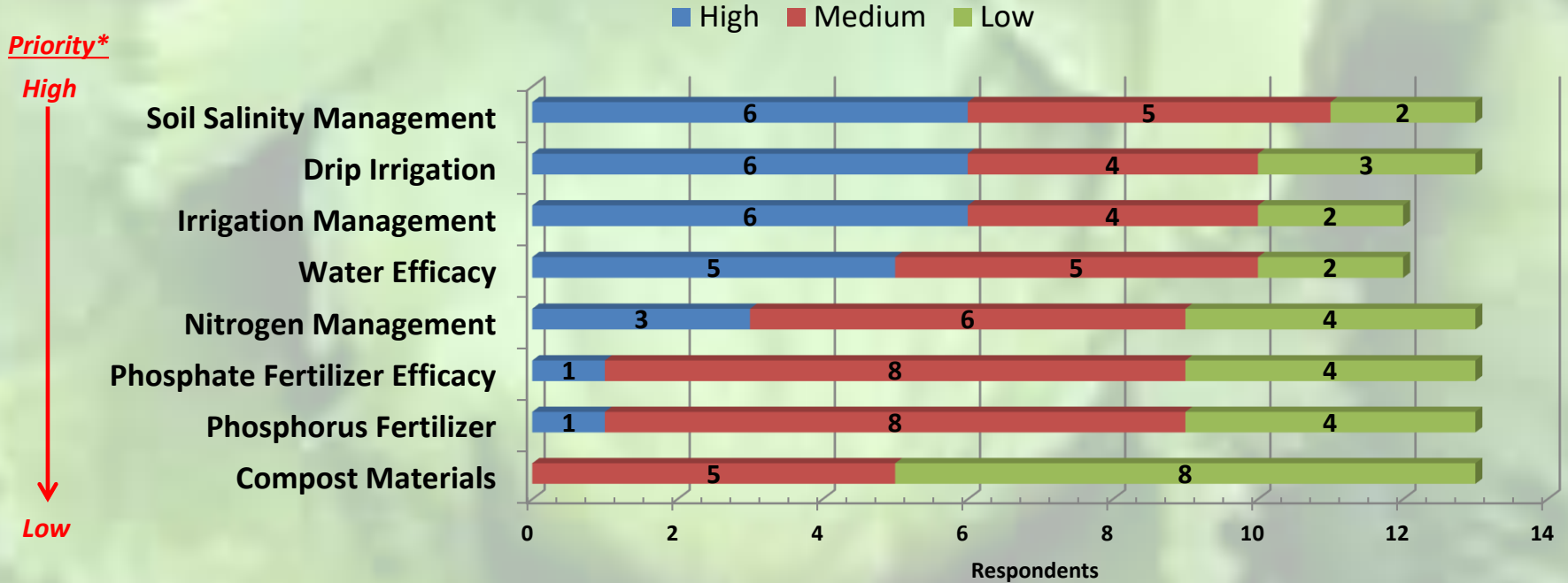
*Priority ranking based on a weighted average

Diseases and Disorders

2018 Producers	2023 All	2023 Producers Only
Fusarium	Fusarium	Fusarium
Downy Mildew	Impatiens Necrotic Spot Virus (INSV)	Sclerotinia Drop
Sclerotinia Drop	Sclerotinia Drop	Impatiens Necrotic Spot Virus (INSV)
Powdery Mildew	Downy Mildew	Downy Mildew
Bottom Rot	Powdery Mildew	Powdery Mildew
Tipburn	Big Vein	Big Vein
Bolting	Lettuce Chlorosis Virus	Lettuce Chlorosis Virus
Big Vein	Beet Western Yellows	Bottom Rot
Rib Discoloration	Bottom Rot	Beet Western Yellows
Bacterial Leaf Spot	Bacterial Leaf Spot	Bolting
Lettuce Chlorosis Virus	Bolting	Bacterial Leaf Spot
Beet Western Yellows	Tipburn	Tipburn
	Rib Discoloration	Rib Discoloration

Soil and Water Management

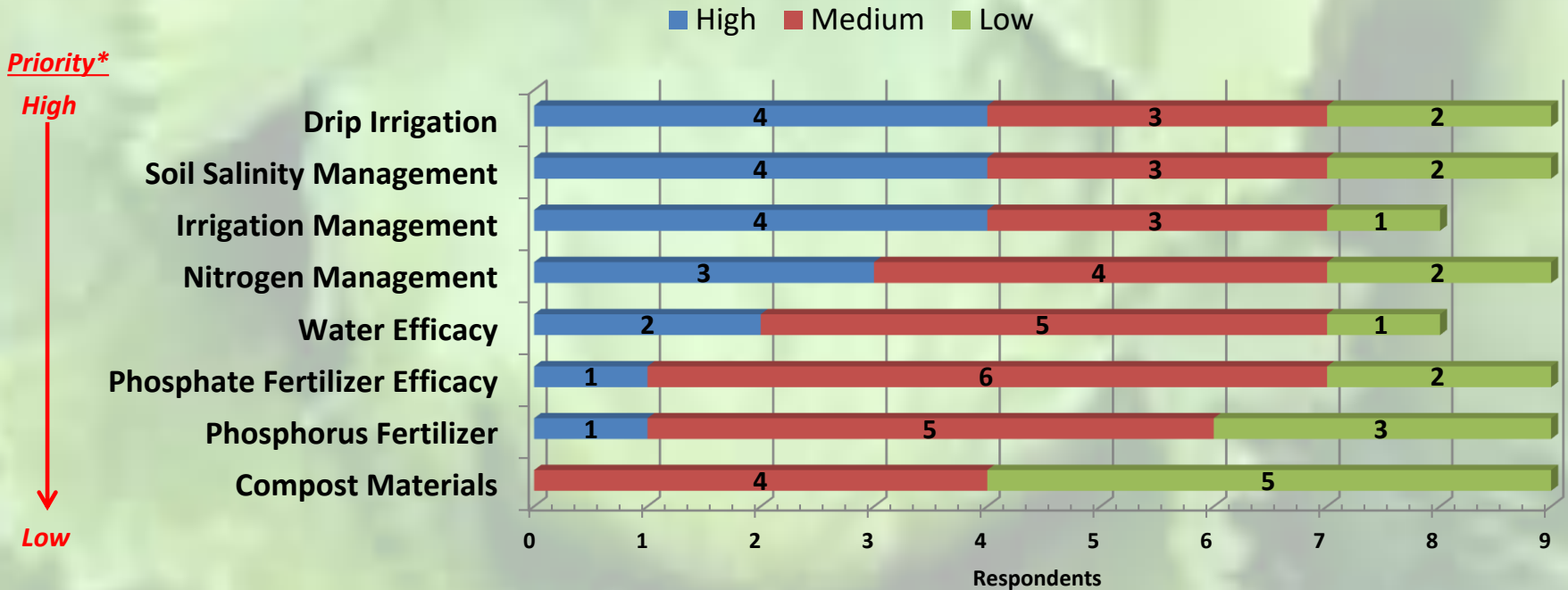
All 2023 Surveys (13)



*Priority ranking based on a weighted average

Soil and Water Management

2023 Producers Only (9)



*Priority ranking based on a weighted average

Soil and Water Management

2018 Producers	2023 All	2023 Producers Only
Nitrogen Management	Soil Salinity Management	Drip Irrigation
Soil Salinity Management	Drip Irrigation	Soil Salinity Management
Irrigation Management	Irrigation Management	Irrigation Management
Phosphate Fertilizer Efficacy	Water Efficacy	Nitrogen Management
Phosphorus Fertilizer	Nitrogen Management	Water Efficacy
Compost Materials	Phosphate Fertilizer Efficacy	Phosphate Fertilizer Efficacy
Drip Irrigation	Phosphorus Fertilizer	Phosphorus Fertilizer
	Compost Materials	Compost Materials

Technology

All 2023 Surveys (13)

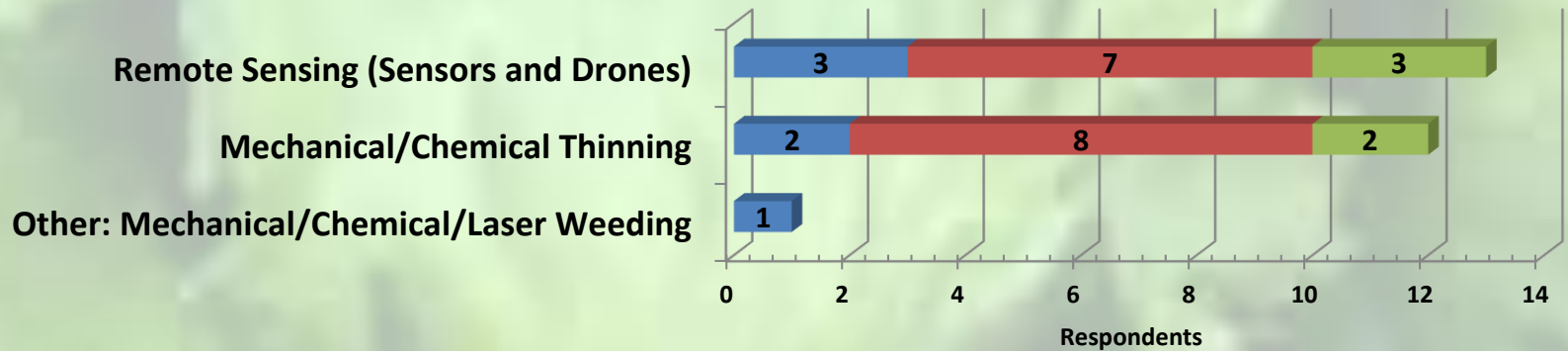
Priority*

High



Low

■ High ■ Medium ■ Low



*Priority ranking based on a weighted average

Technology

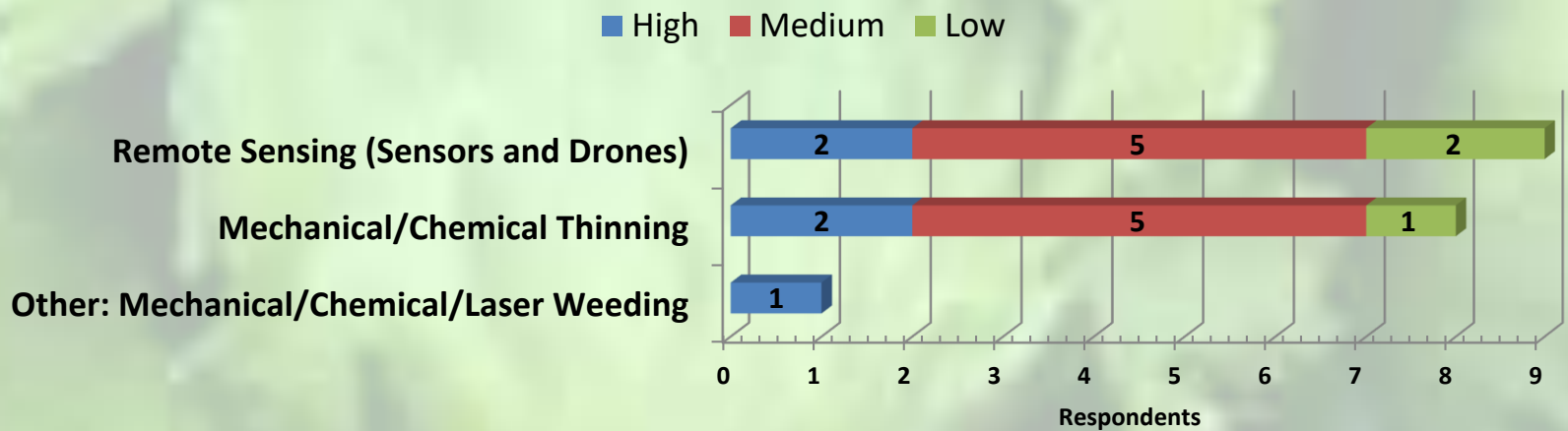
2023 Producers Only (9)

Priority*

High



Low



*Priority ranking based on a weighted average

Technology

2018 Producers	2023 All	2023 Producers Only
Mechanical/Chemical Thinning	Remote Sensing (Sensors and Drones)	Remote Sensing (Sensors and Drones)
Remote Sensing (Sensors and Drones)	Mechanical/Chemical Thinning	Mechanical/Chemical Thinning
Other: Mechanical Weeding	Other: Mechanical/Chemical/Laser Weeding	Other: Mechanical/Chemical/Laser Weeding

Insects and Nematodes

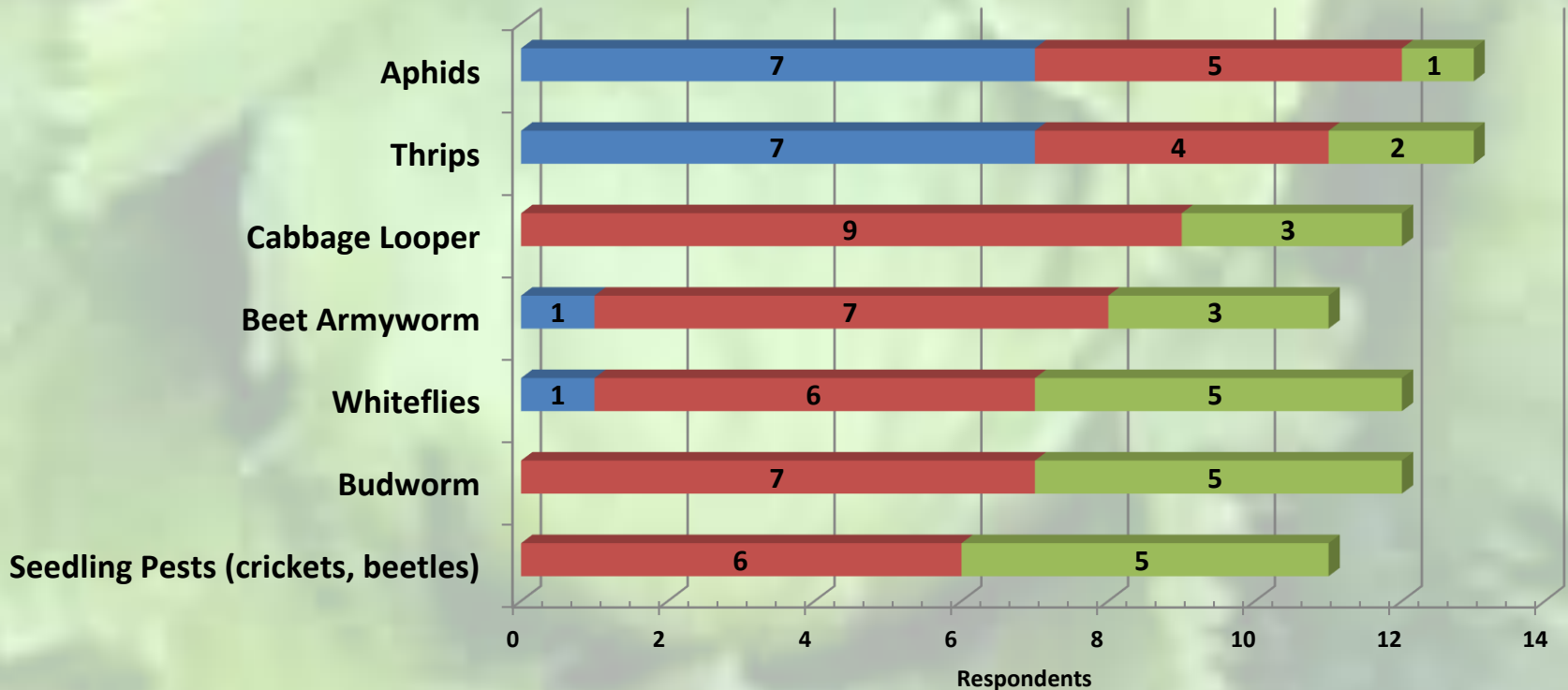
All 2023 Surveys (13)

Priority*

High

Low

■ High ■ Medium ■ Low



*Priority ranking based on a weighted average

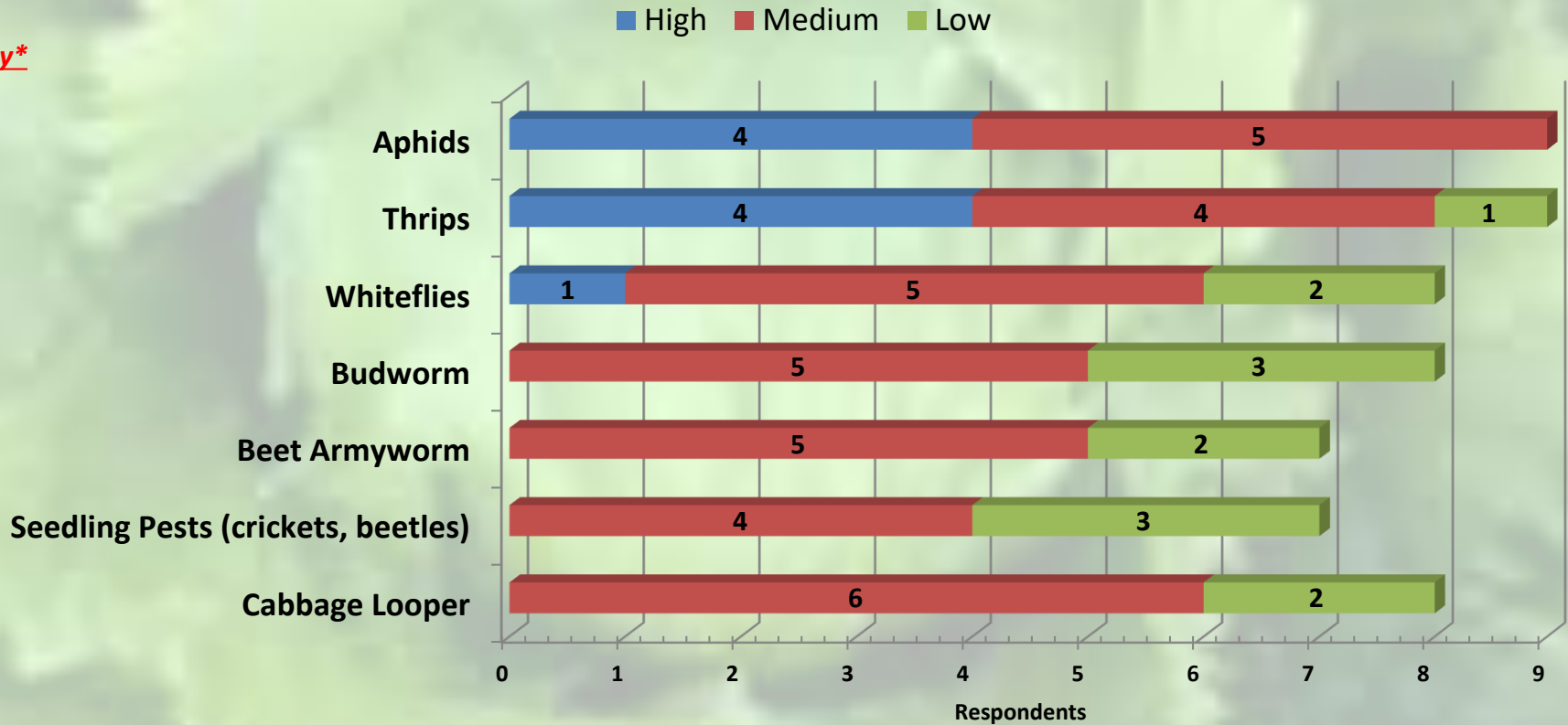
Insects and Nematodes

2023 Producers Only (9)

Priority*

High

Low



*Priority ranking based on a weighted average

Insects and Nematodes

2018 Producers	2023 All	2023 Producers Only
Thrips	Aphids	Aphids
Aphids	Thrips	Thrips
Whiteflies	Cabbage Looper	Whiteflies
Cabbage Looper	Beet Armyworm	Budworm
Beet Armyworm	Whiteflies	Beet Armyworm
Seedling Pests (crickets, beetles)	Budworm	Seedling Pests (crickets, beetles)
Budworm	Seedling Pests (crickets, beetles)	Cabbage Looper
Other: Diamondback Moth		
Other: Bagrada Bug/Beetle		

Food Safety

All 2023 Surveys (13)

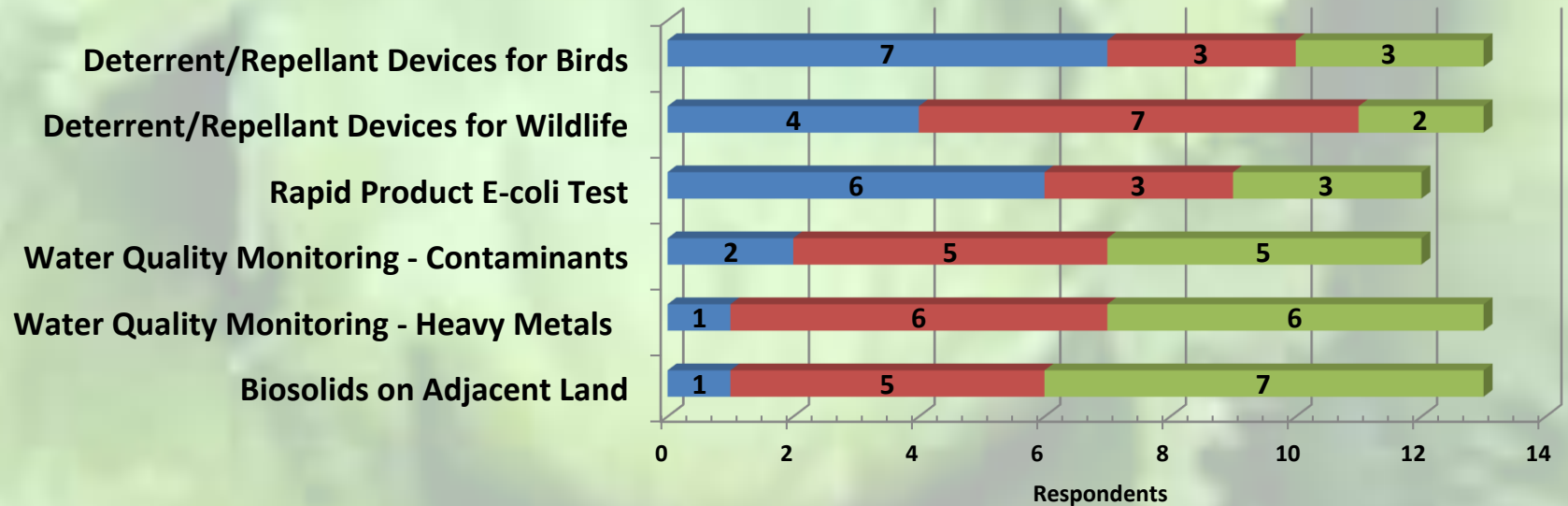
Priority*

High



Low

■ High ■ Medium ■ Low



*Priority ranking based on a weighted average

Food Safety

2023 Producers Only (9)

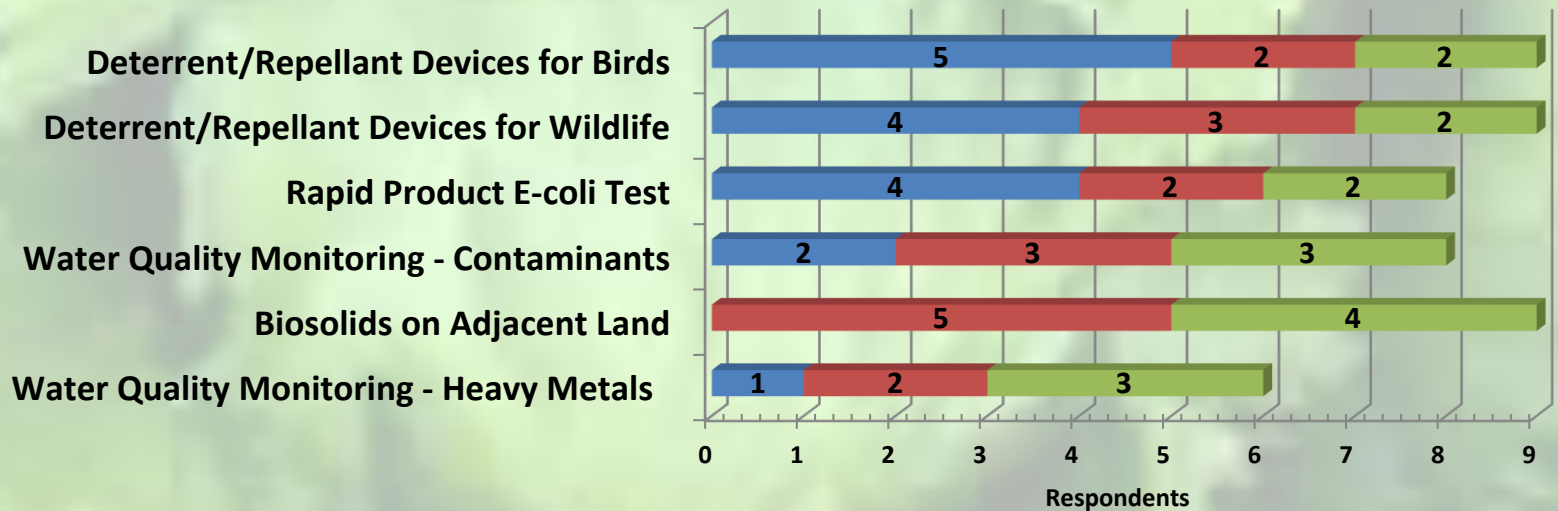
Priority*

High



Low

■ High ■ Medium ■ Low



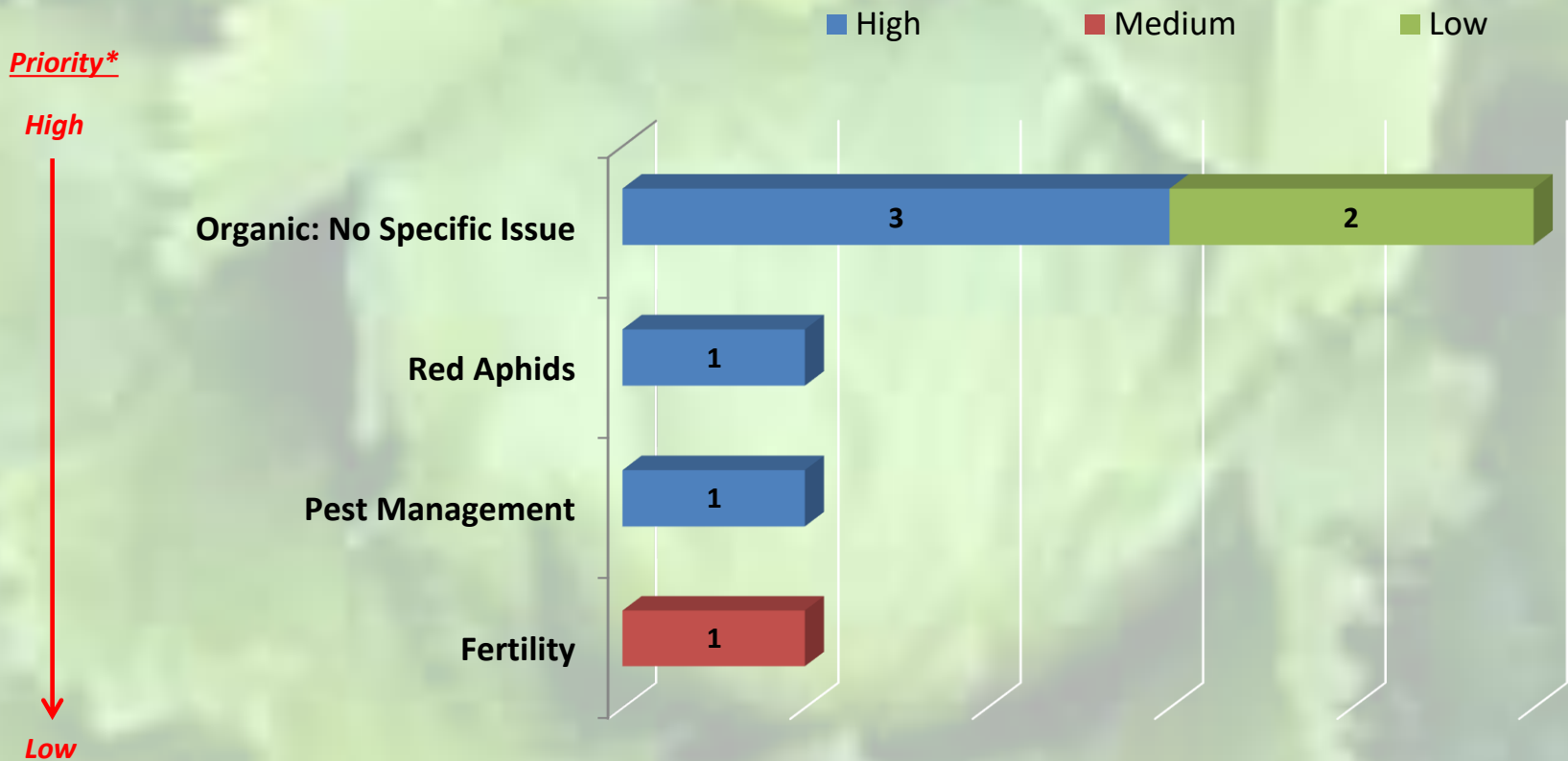
*Priority ranking based on a weighted average

Food Safety

2018 Producers	2023 All	2023 Producers Only
Deterrent/Repellant Devices for Birds	Deterrent/Repellant Devices for Birds	Deterrent/Repellant Devices for Birds
Deterrent/Repellant Devices for Wildlife	Deterrent/Repellant Devices for Wildlife	Deterrent/Repellant Devices for Wildlife
Rapid Product E-coli Test	Rapid Product E-coli Test	Rapid Product E-coli Test
Water Quality Monitoring - Contaminants	Water Quality Monitoring - Contaminants	Water Quality Monitoring - Contaminants
Water Quality Monitoring - Heavy Metals	Water Quality Monitoring - Heavy Metals	Biosolids on Adjacent Land
Biosolids on Adjacent Land	Biosolids on Adjacent Land	Water Quality Monitoring - Heavy Metals

Organic

All 2023 Surveys (13)



*Priority ranking based on a weighted average

Organic

2023 Producers Only (9)

Priority*

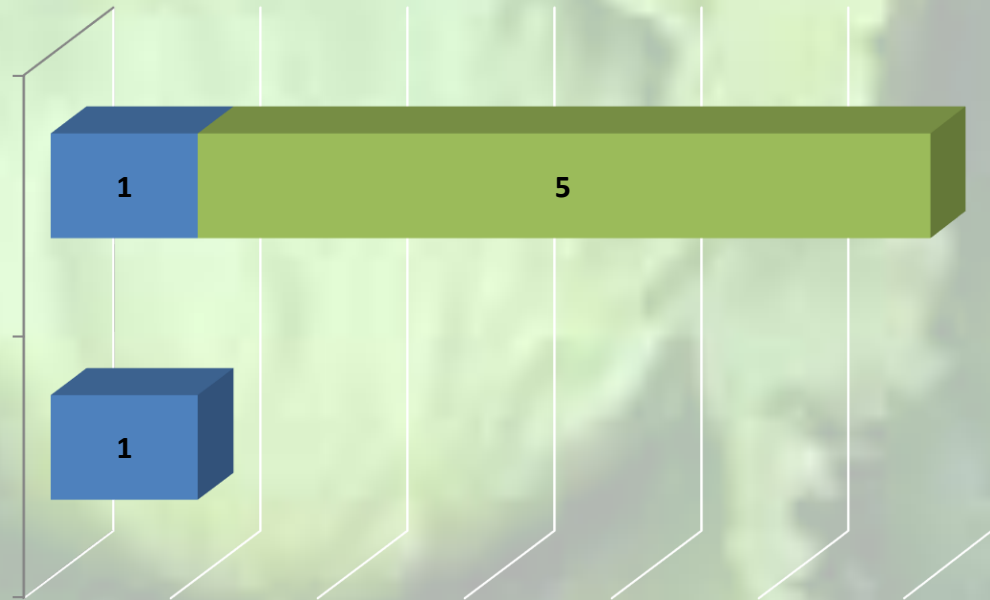
High

High

Medium

Low

Organic: No Specific Issue



Low

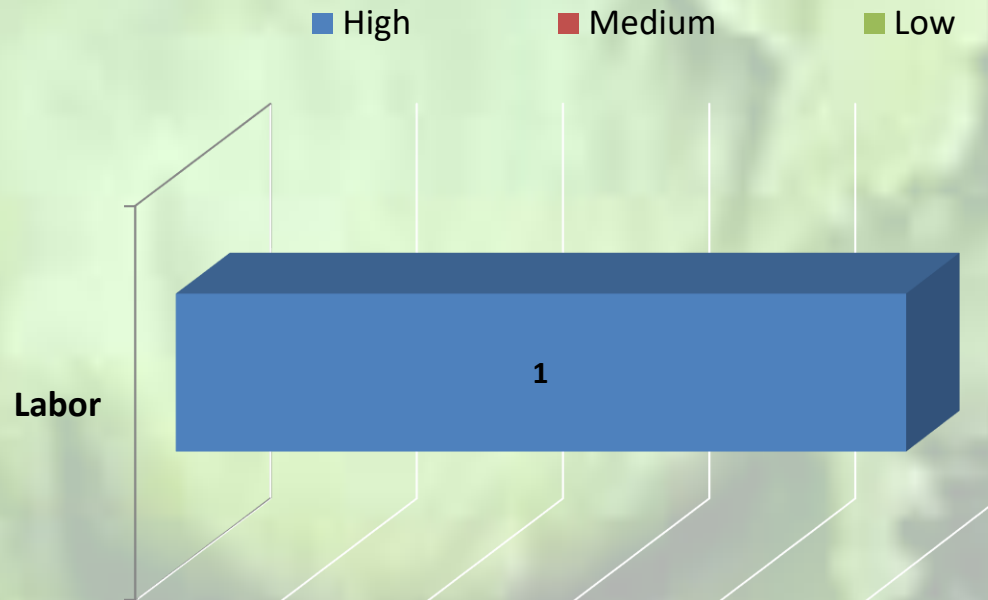
*Priority ranking based on a weighted average

Organic

2018 Producers	2023 All	2023 Producers Only
Organic: No Specific Issue	Organic: No Specific Issue	Organic: No Specific Issue
Mildew	Red Aphids	Red Aphids
Aphid	Pest Management	
	Fertility	

Other

Total and Producer Only



Other

2018 Producers	2023 All	2023 Producers Only
Disease Control/Resistance	Labor	Labor