



CAL POLY

Strawberry Center

Three-year summary of *Macrophomina* crown rot and *Verticillium* wilt trials in strawberry

Seyed Mojtaba Mansouripour, Gerald Holmes

Cal Poly Strawberry Center



CAL POLY

Strawberry Center



- ✓ Planting mid-October 2016, 2017 and 2018
- ✓ Macrophomina inoculation two weeks after planting
- ✓ Macrophomina inoculation using Cornmeal-sand
- ✓ Naturally infested field for Verticillium trial





CAL POLY

Strawberry Center



- ✓ **Reading plant mortality every month**
- ✓ **Every two weeks after symptoms show up**

Verticillium Field



**Week
30**



**Week
43**

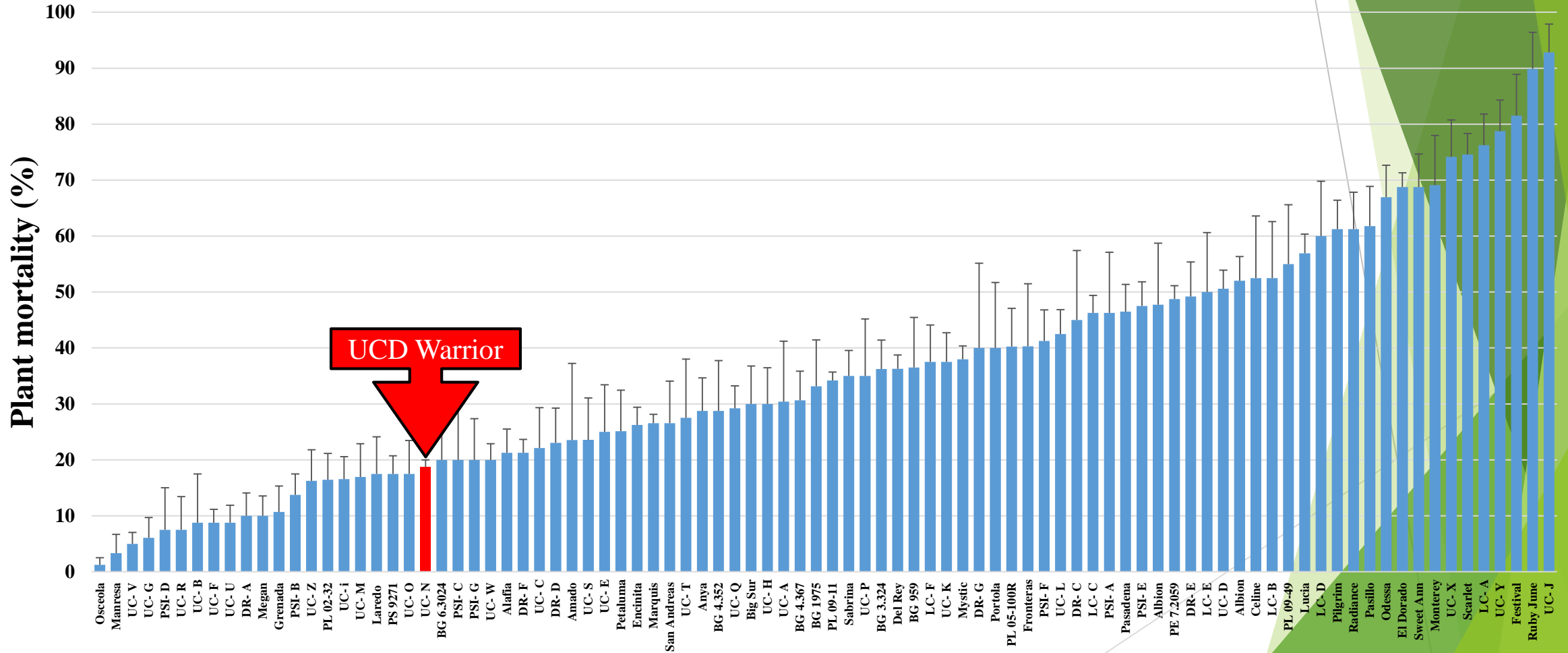


Macrophomina Field



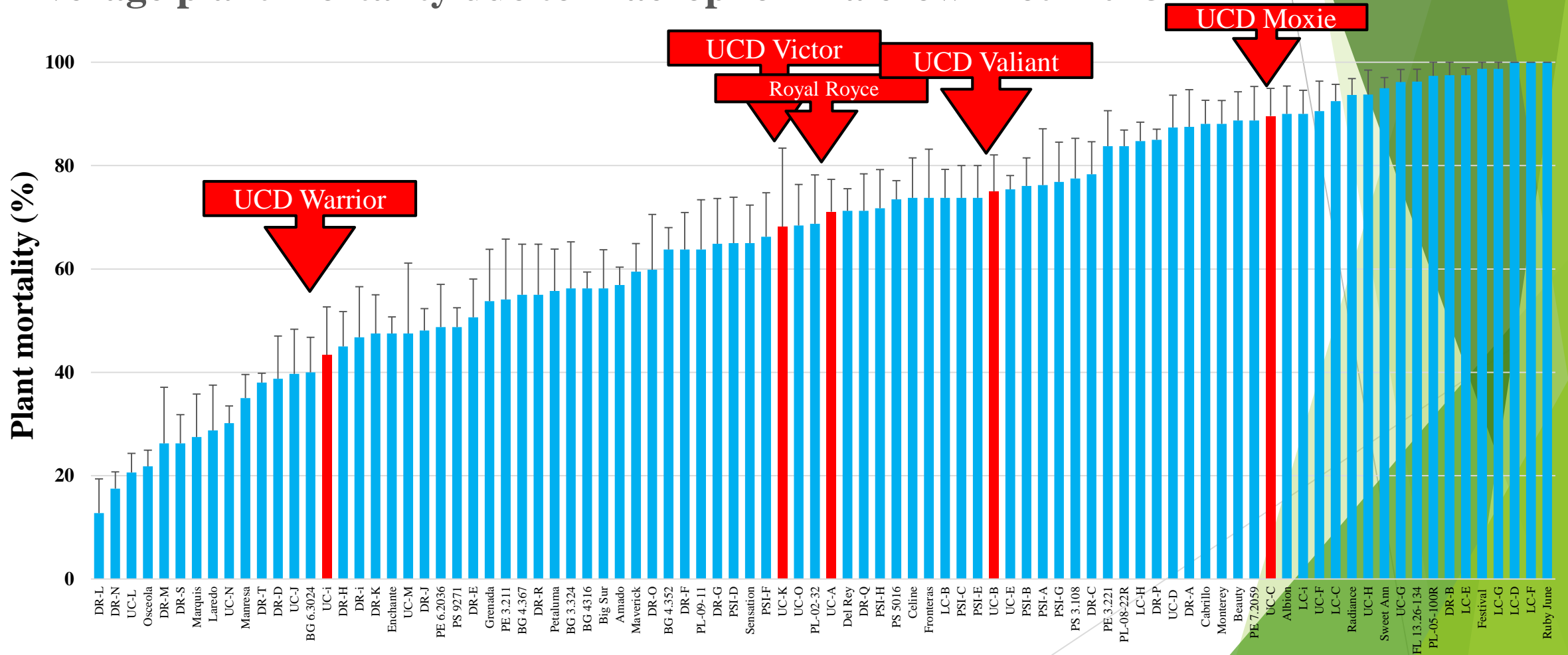


Average plant mortality due to *Macrophomina* crown rot-2017



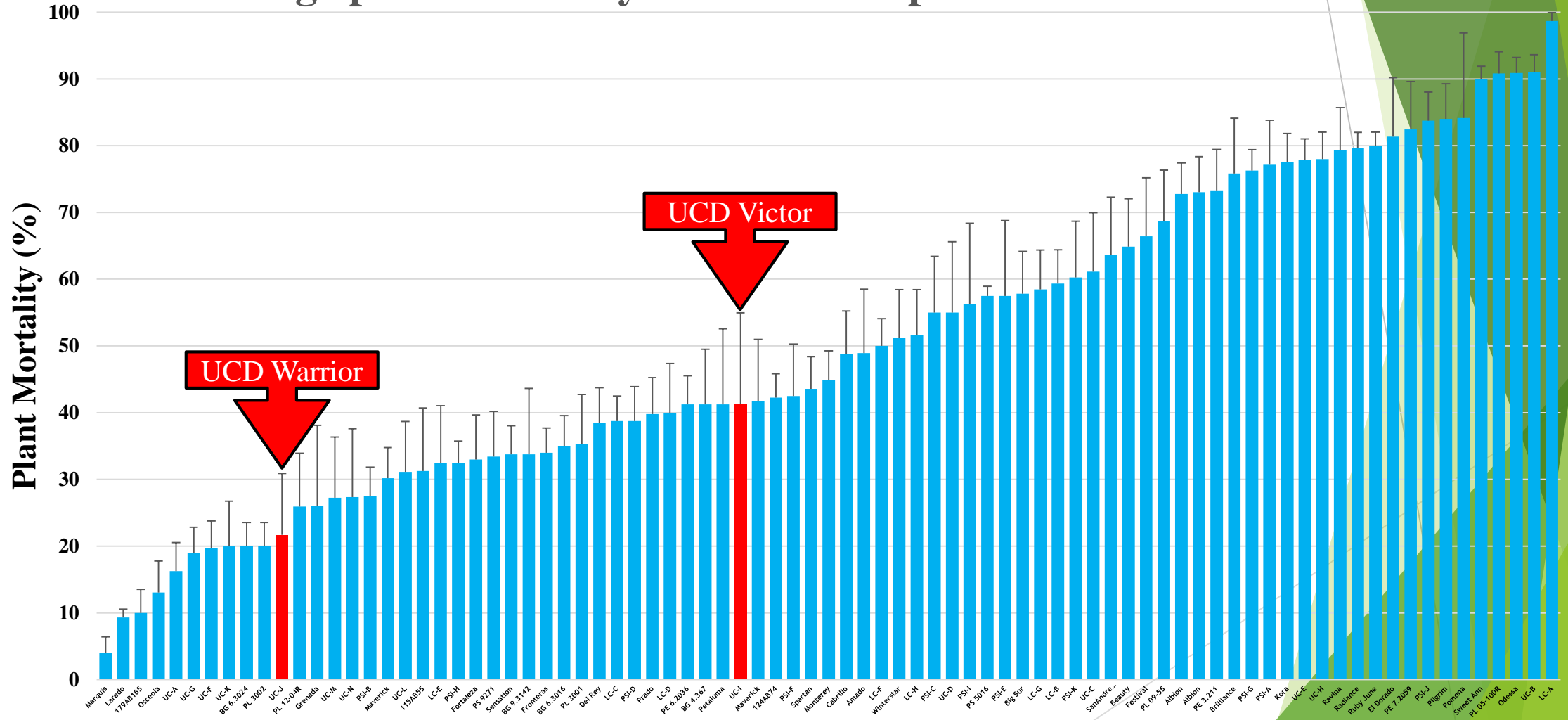


Average plant mortality due to *Macrophomina* crown rot -2018





Average plant mortality due to *Macrophomina* crown rot-2019

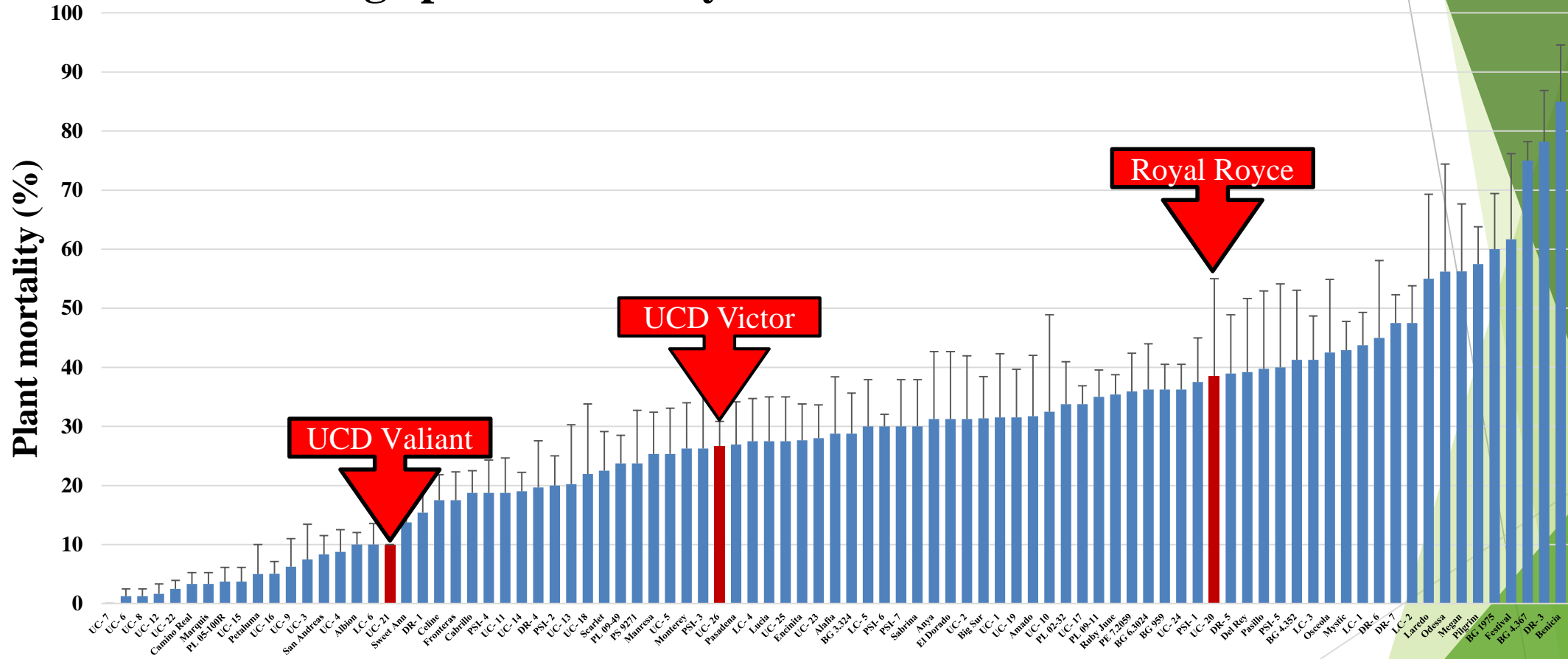




CAL POLY

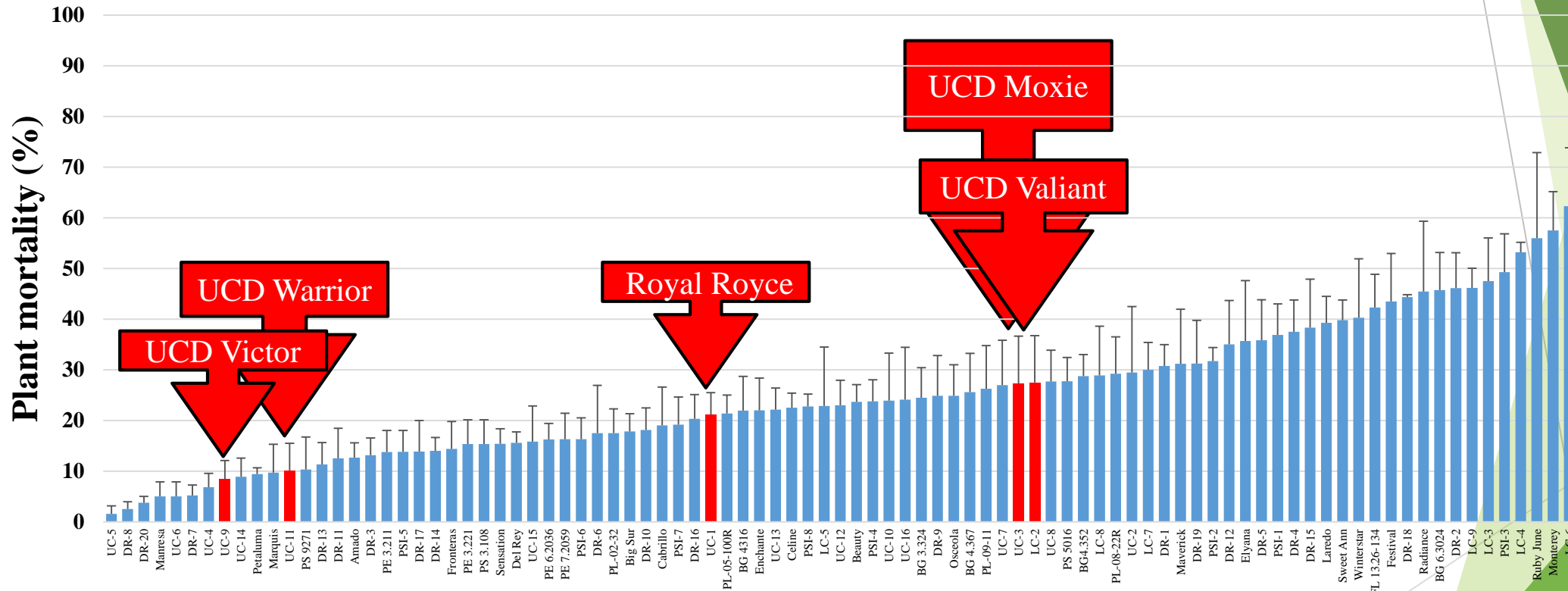
Strawberry Center

Average plant mortality due to Verticillium wilt- 2017



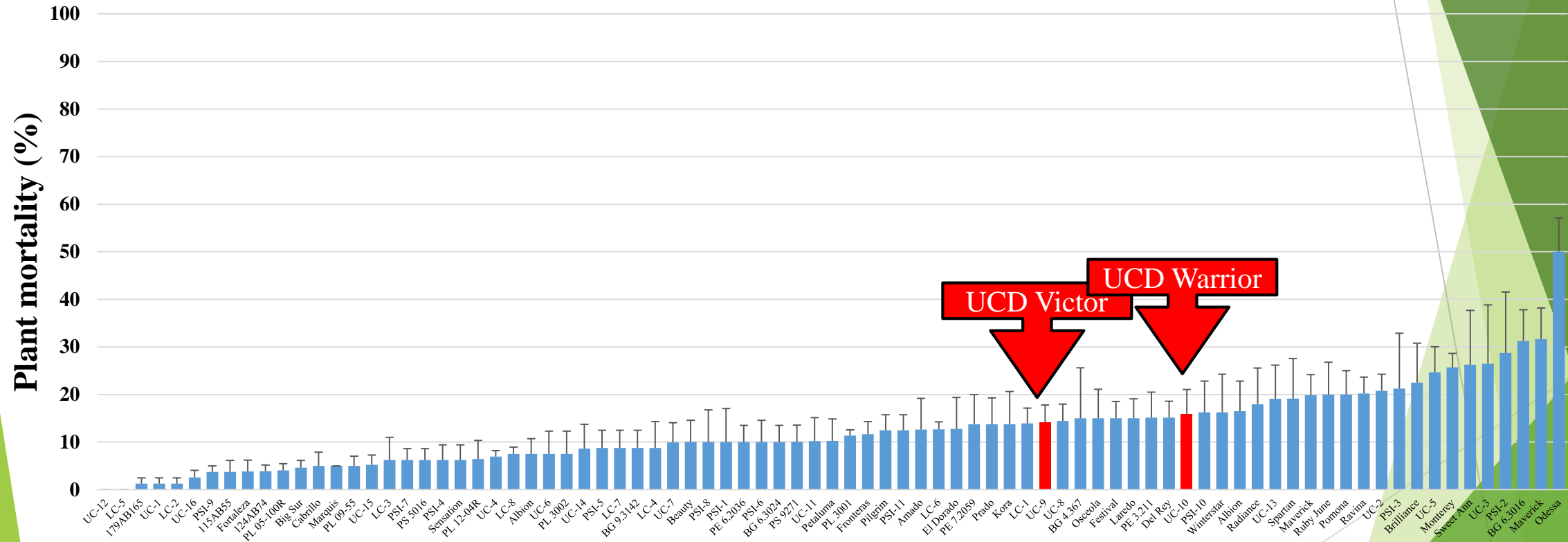


Average plant mortality due to Verticillium wilt- 2018



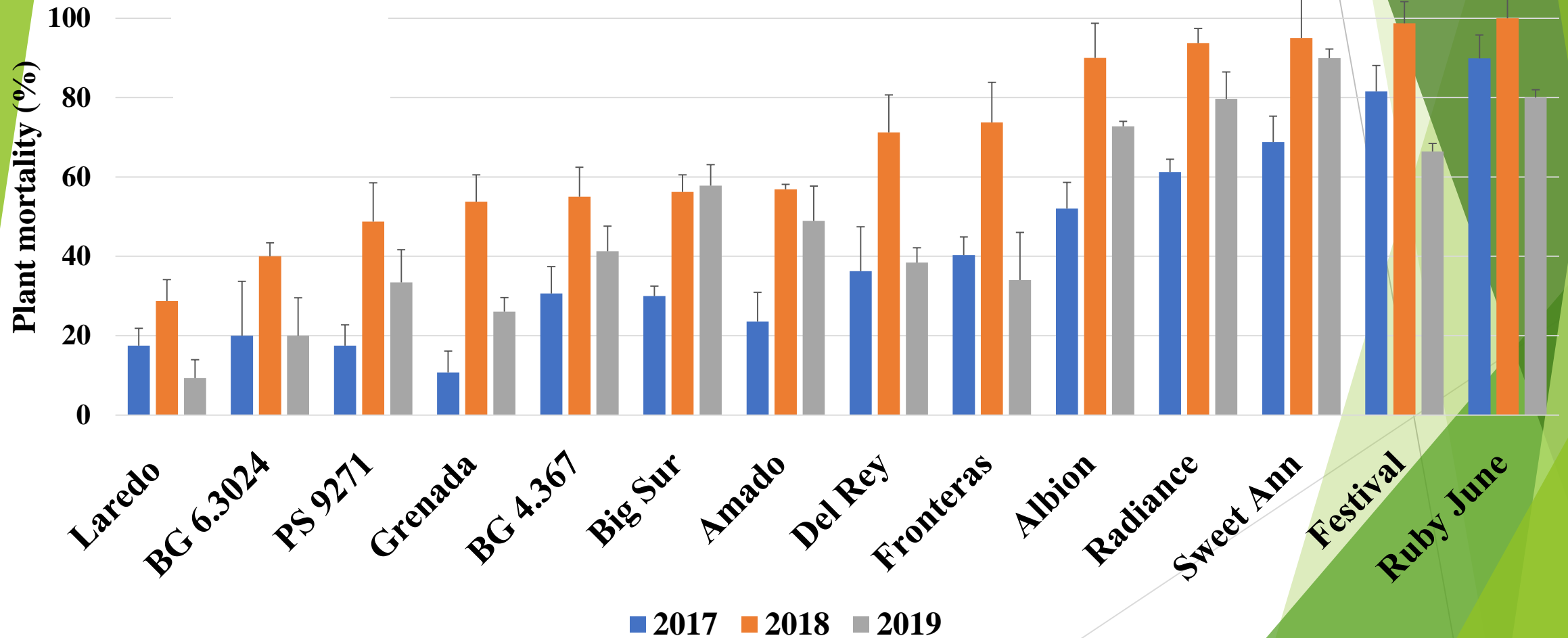


Average plant mortality due to Verticillium wilt- 2019



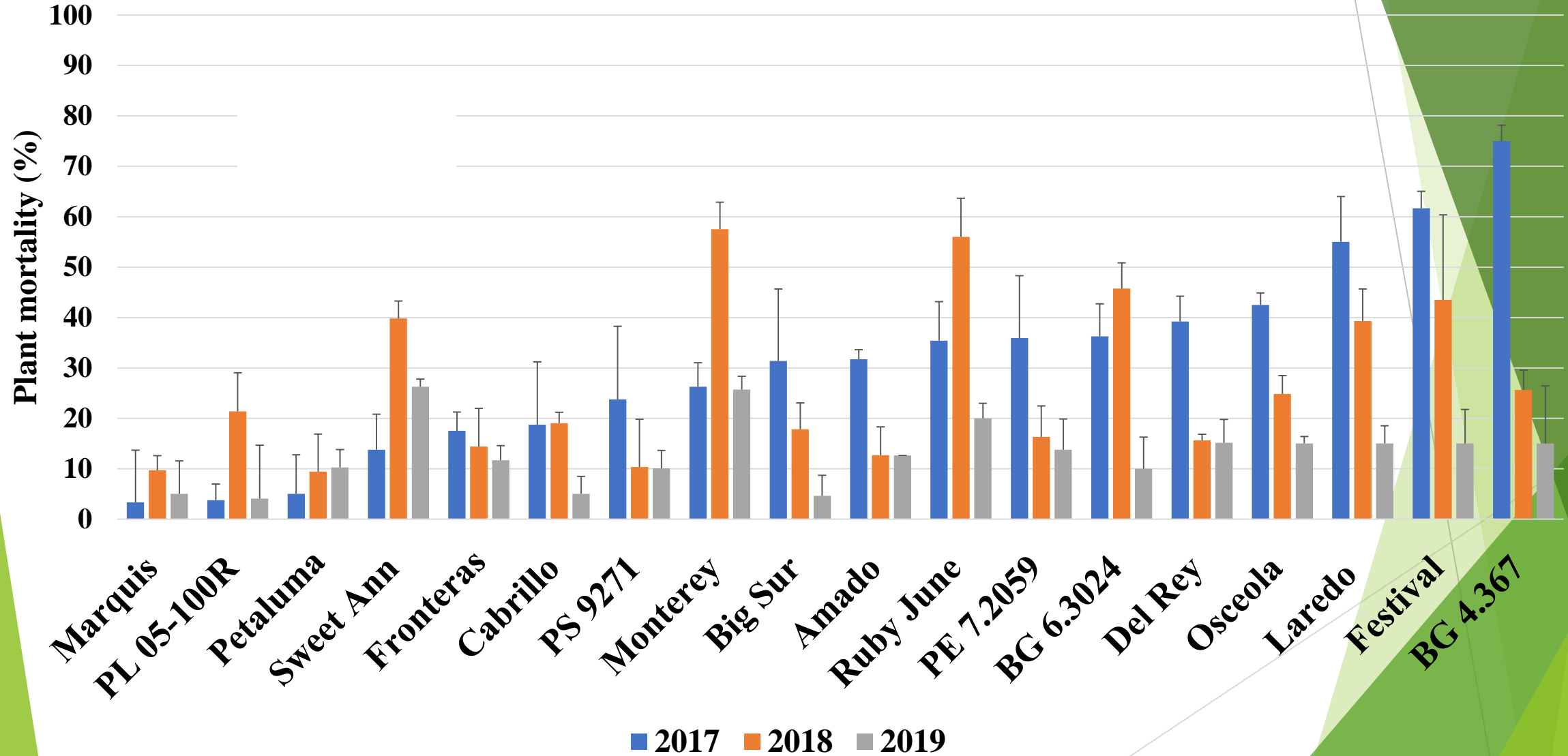


Macrophomina crown rot 2017-2019





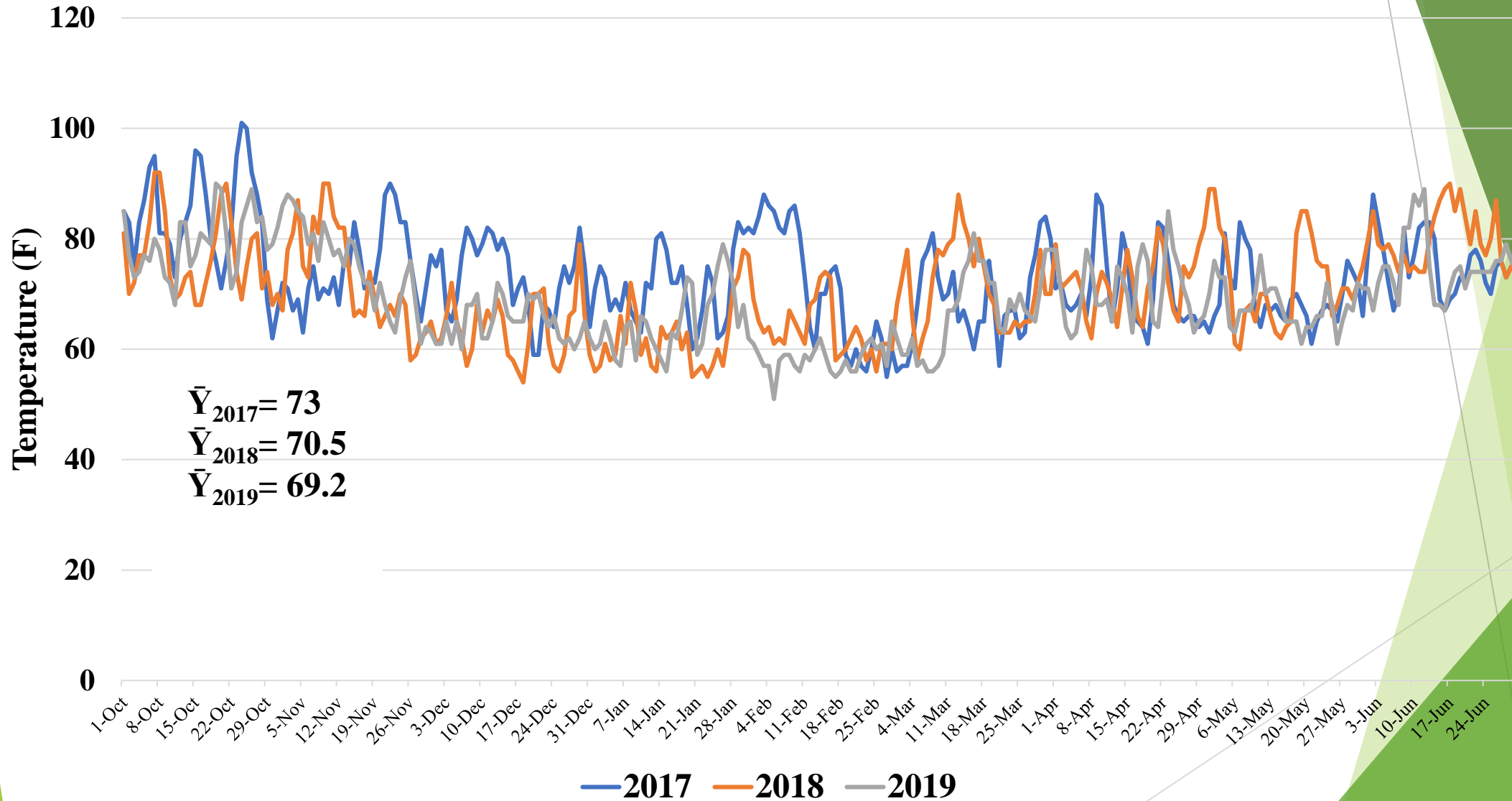
Verticillium wilt 2017-2019





CAL POLY

Strawberry Center

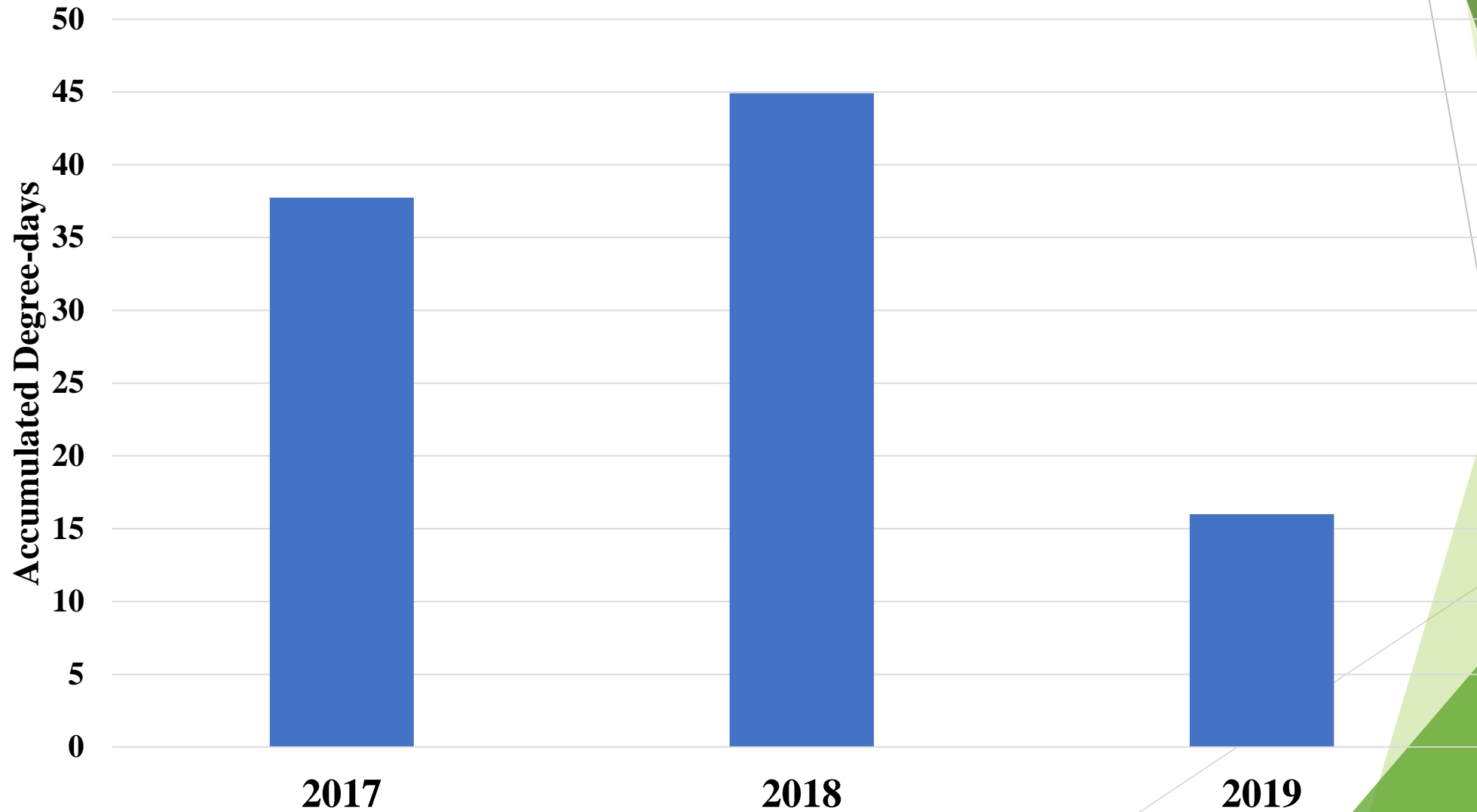




CAL POLY

Strawberry Center

Degree-days (>80°F)

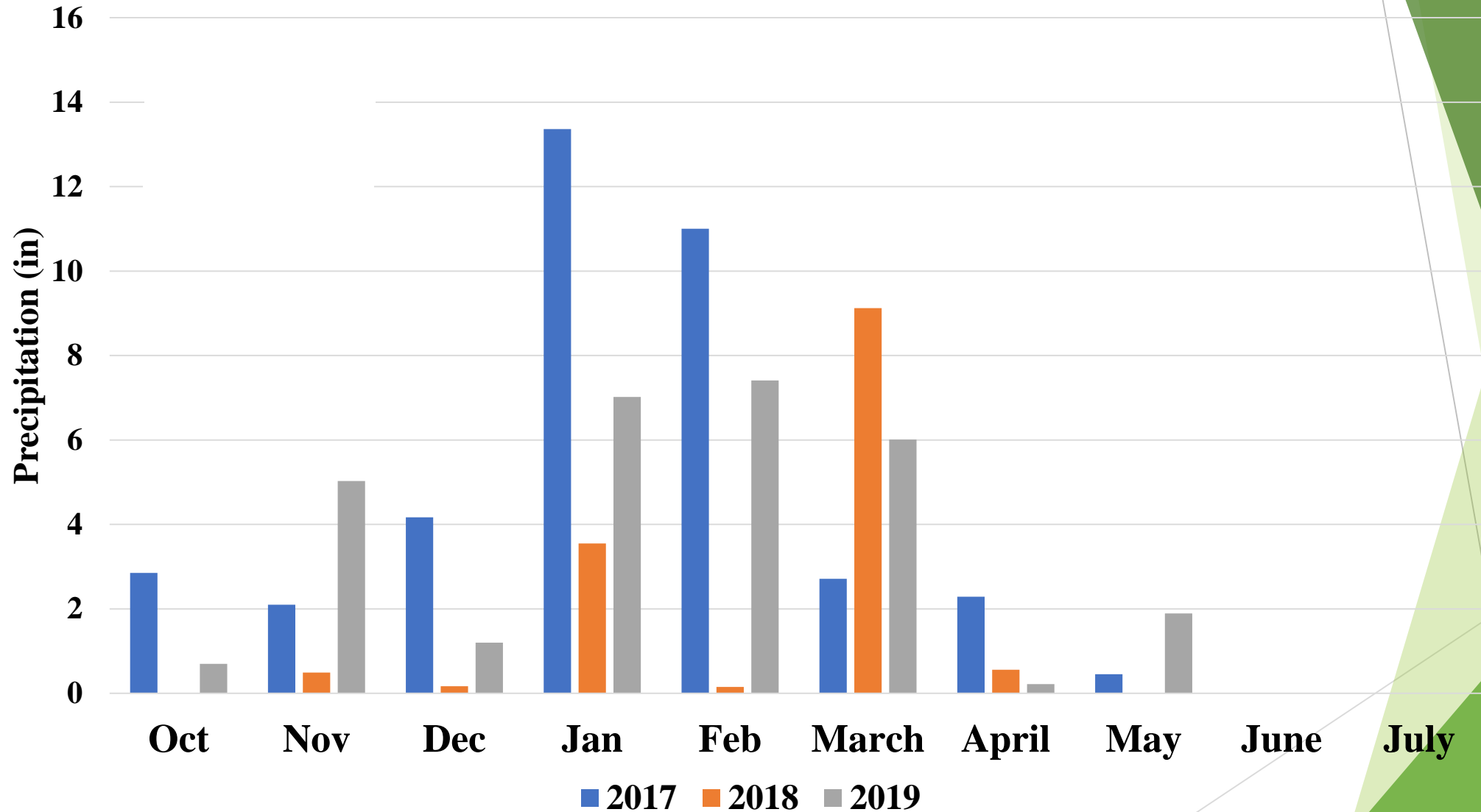




CAL POLY

Strawberry Center

Precipitation





CAL POLY

Strawberry Center

Workforce Development :: Food Safety :: Pest Management :: Soil/Water/Nutrients :: Automation :: Nutrition :: Prom

DN or SD

- Select all
- Day Neutral
- Short Day

Variety

- Select all
- Albion
- Benicia
- Cabrillo
- Camarosa
- Camino Real
- Diamante
- Fronteras
- Gaviota
- Grenada
- Merced
- Mojave
- Monterey
- Palomar
- Petaluma
- Portola

Legend Acronym	Legend	Resistance Numerical Category
R	Resistant	1
MR	Moderate Resistance	2
MS	Moderate Susceptibility	3
S	Susceptible	4

Variety	Type	Macrophomina	Verticillium	Fusarium	Phytophthora
UCD Warrior	SD	2	3	1	2
Portola	DN	4	2	1	2
UCD Victor	SD	3	3	1	2
Camino Real	SD	4	1	3	2
Fronteras	SD	3	3	1	3
San Andreas	DN	4	2	1	3
UCD Moxie	DN	4	2	1	3
Grenada	SD	2	2	4	3
Petaluma	SD	3	2	3	3
Ventana	SD	4	3	1	3
UCD Royal Royce	DN	3	2	4	3
Albion	DN	4	2	4	3
Cabrillo	DN	4	2	4	3
UCD Valiant	DN	4	2	4	3
Monterey	DN	4	3	4	3

Acknowledgements



**SCRI grant No.
2017-51181-26833**



UC DAVIS

