



# Salt and water stress effects on charcoal rot development in summer strawberry

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# At Camarillo , CA summer planting

- Portola or Eclipse
- With or w/o *M.phaseolina* inoculum in planting holes
- 5 factors:
  - 3 salt combinations via drip irrigation,
  - reduced irrigation and
  - grower standard irrigation (monitored by sensors and soil sampling )

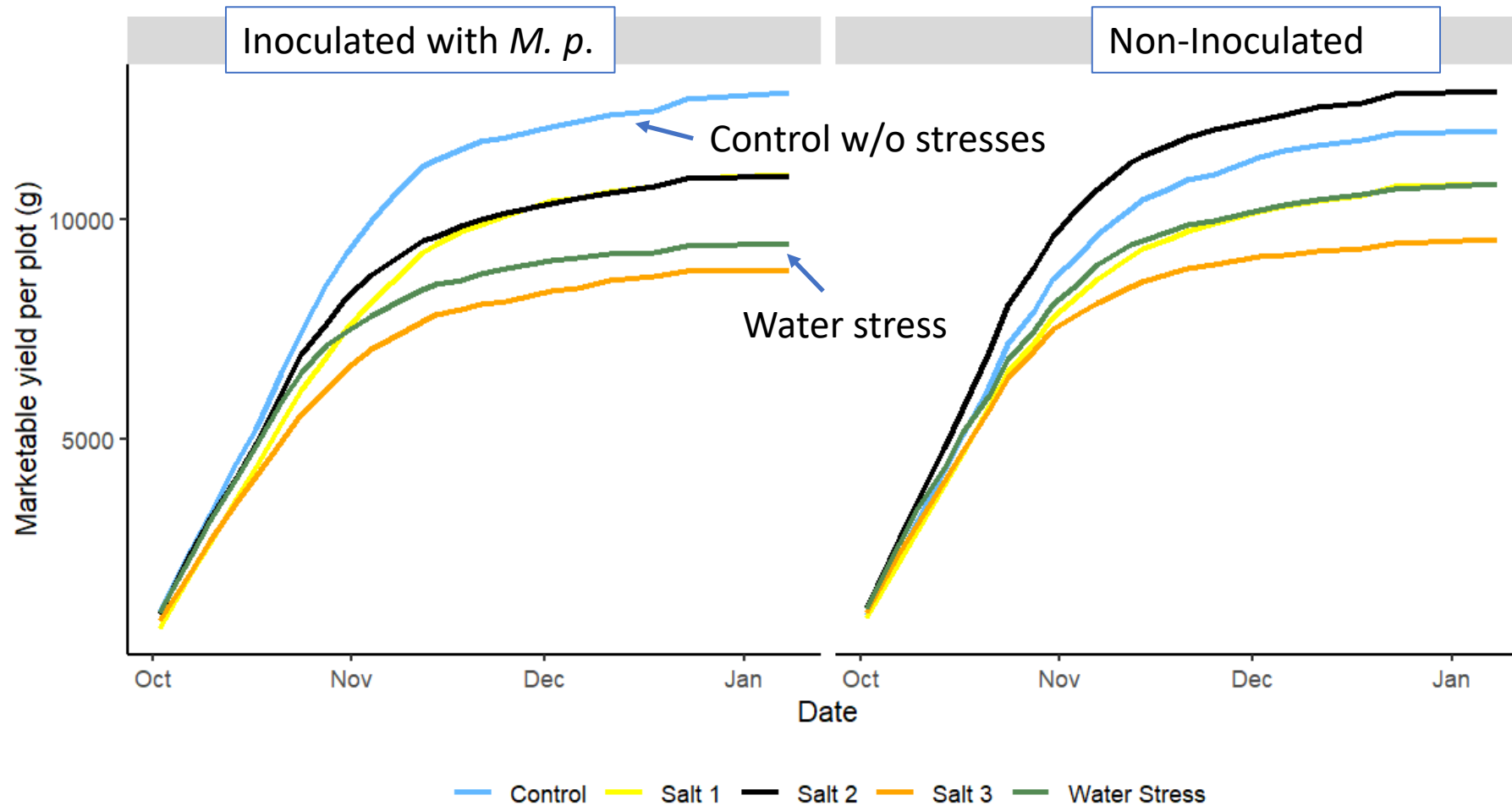
50 g of infested sand placed at ~10 inches depth in the planting holes, delivered via plastic funnel



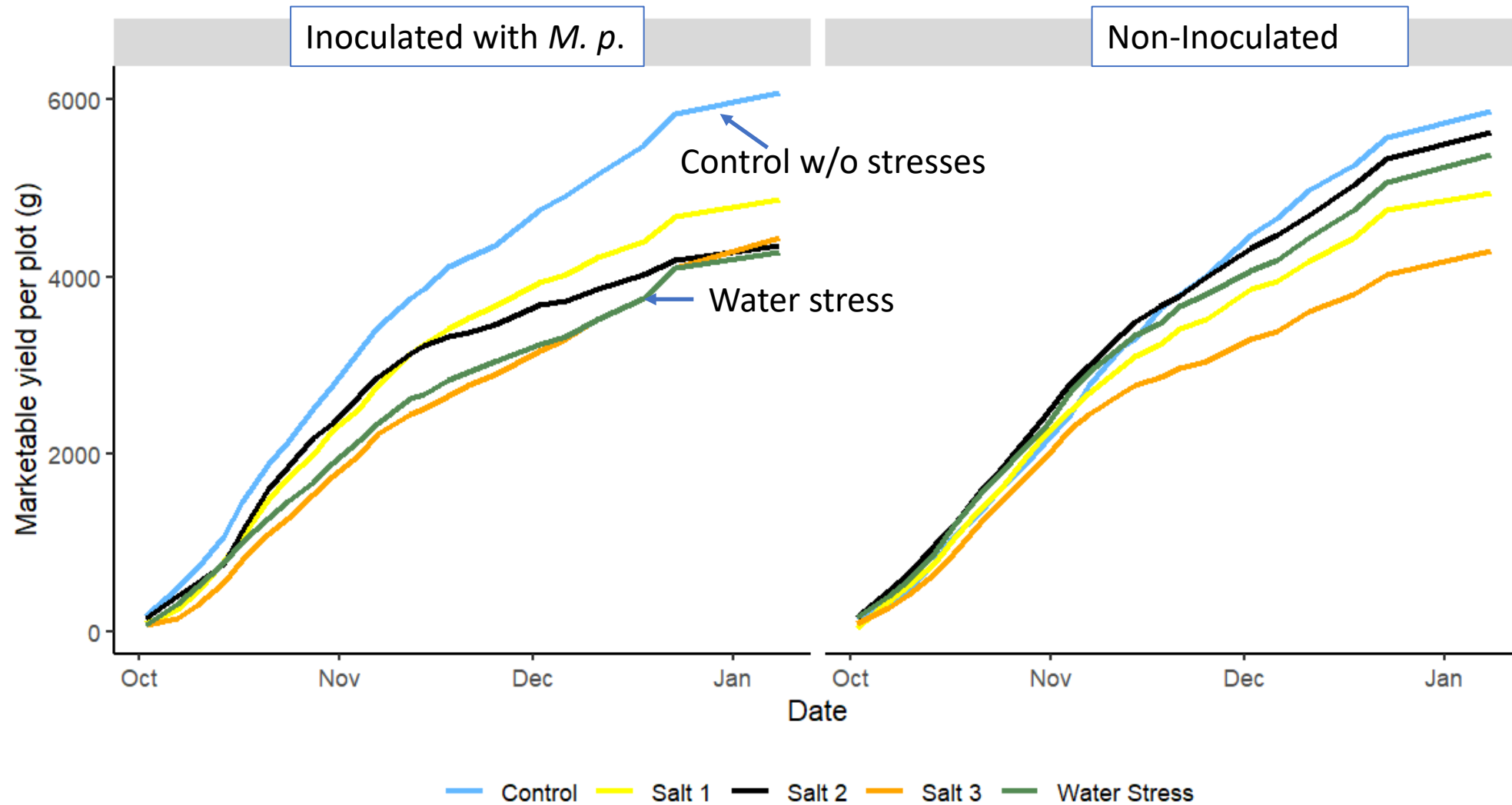
|              | ECw (dS/m) | Cl (meq/l) | Moisture<br>threshold (cb) |
|--------------|------------|------------|----------------------------|
| Control      | 1.3        | 1.6        | 10                         |
| Water stress | 1.3        | 1.6        | 60/30                      |
| Salt 1       | 1.8        | 6.8        | 10                         |
| Salt 2       | 2.4        | 13.2       | 10                         |
| Salt 3       | 3.1        | 4.8        | 10                         |



# Eclipse: marketable yield



# Portola: marketable yield





**30 Sept.**

**Eclipse w/o M.p**



**Eclipse with M.p. inoculum**





**30 Sept.**

**Portola w/o M.p. inoculum**

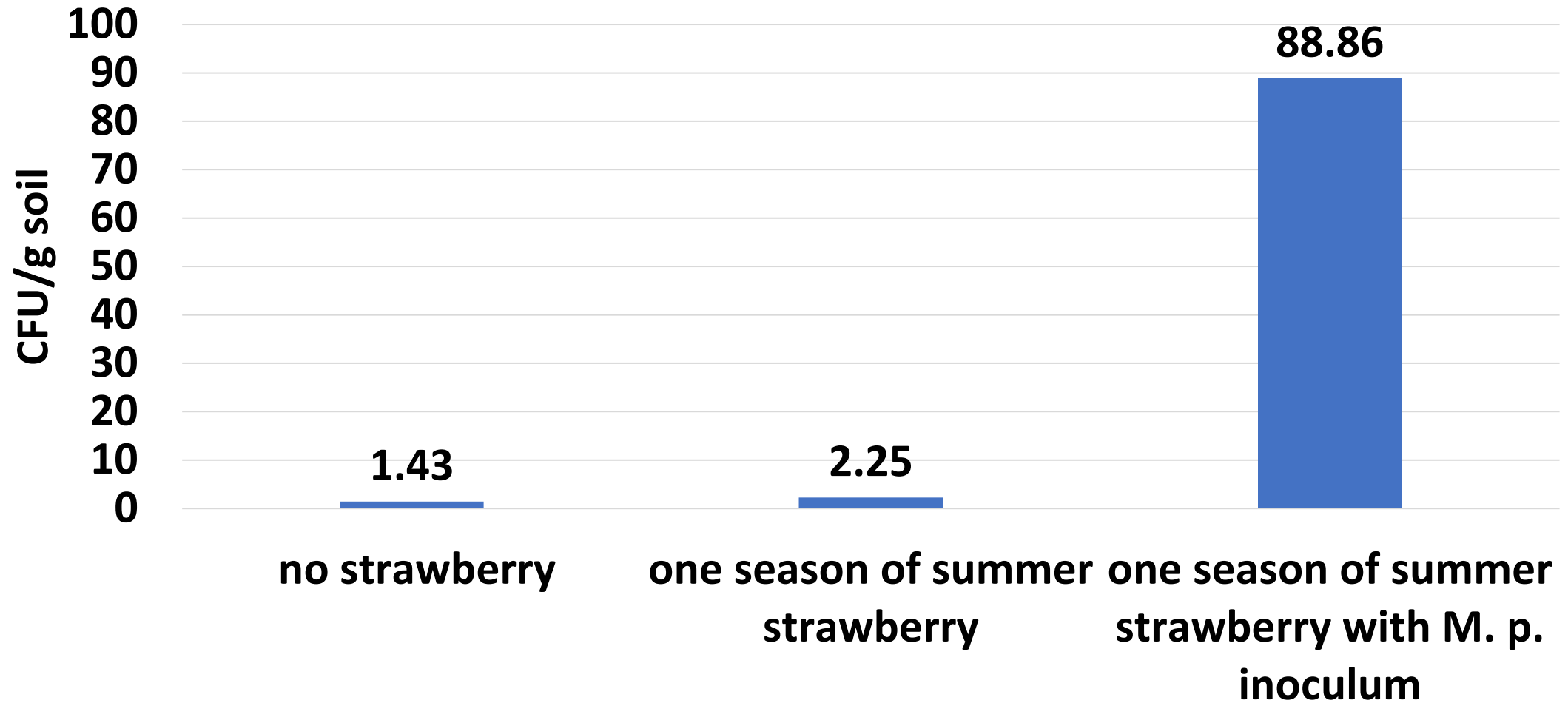


**Portola with M.p. inoculum**

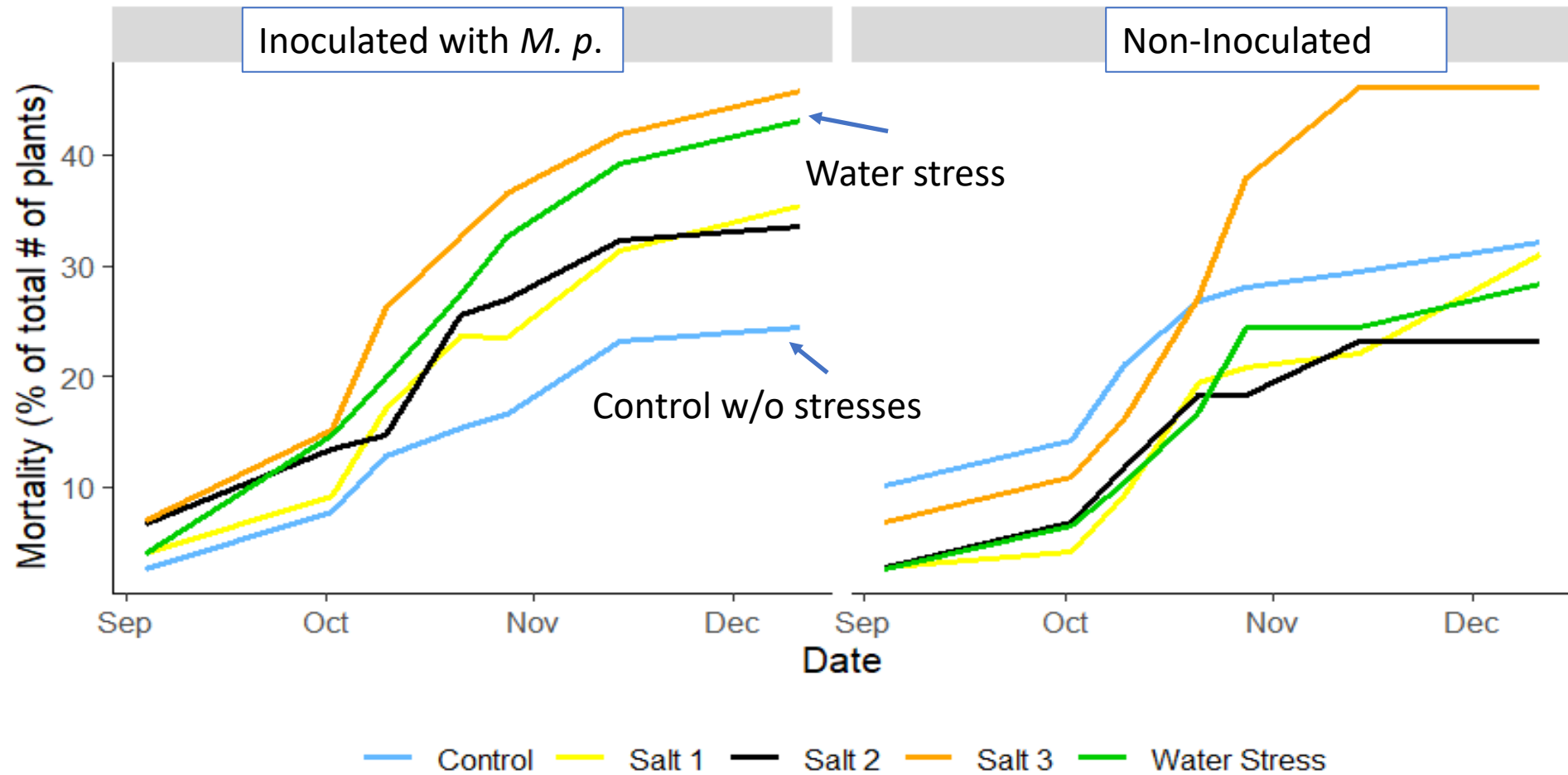




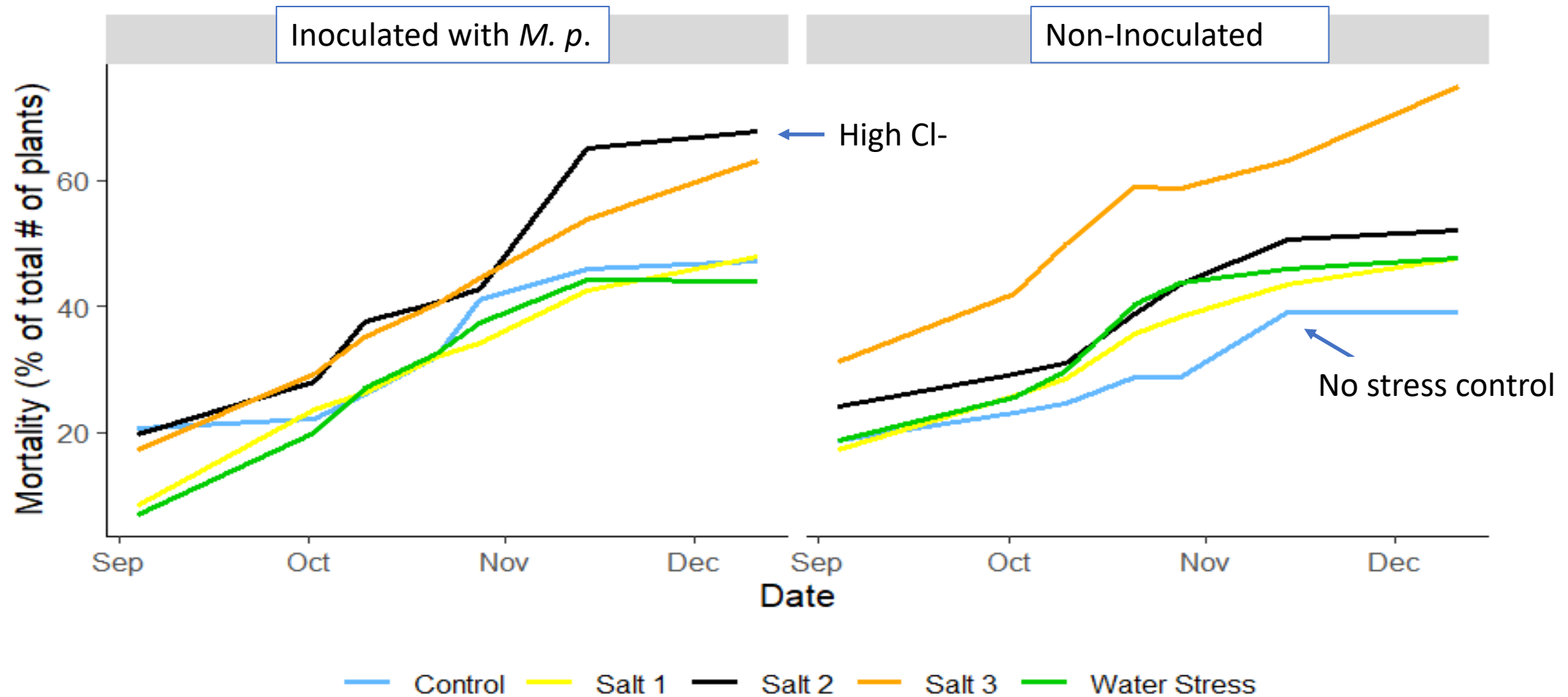
## ***M.phaseolina* in soil 2 years after 350 lb/A Pic flat**



# Eclipse: mortality



# Portola: mortality





## **2025-26 trial:**

- **Applying salt treatments earlier (pre-plant)**
- **First die-back on Sept 3**