

# Palmer Amaranth in Delaware



Cooperative Extension

COLLEGE OF AGRICULTURE &  
NATURAL RESOURCES

**Palmer Amaranth and Redroot  
Pigweed\* look very similar:**

**Will you be able tell them apart ???**

**\*What most people in DE call redroot pigweed is really smooth pigweed**

# Palmer amaranth

- Summer annual weed
- Fastest growing pigweed
- Very competitive
- Very drought tolerant
- Emerges from spring until frost
- Produces over 600,000 seeds per plant
  - separate male and female plants
- Develops resistance to herbicides quickly



**GLYPHOSATE-RESISTANT PALMER AMARANTH HAS BEEN  
CONFIRMED IN DE AND MD**

# Comparing Seedlings

## Palmer amaranth

- None to very few hairs on stem and leaves
  - leaves have shinier appearance
- Occasionally v-shaped watermark
  - visible on less than 5% of the plants
- Long petioles, narrower leaves

## Smooth pigweed

- Hairs on stem and leaves
  - leaves have “duller” appearance
- No watermarks
- “Shorter” petioles, wider leaves



**Palmer amaranth**  
**no hairs on stem**

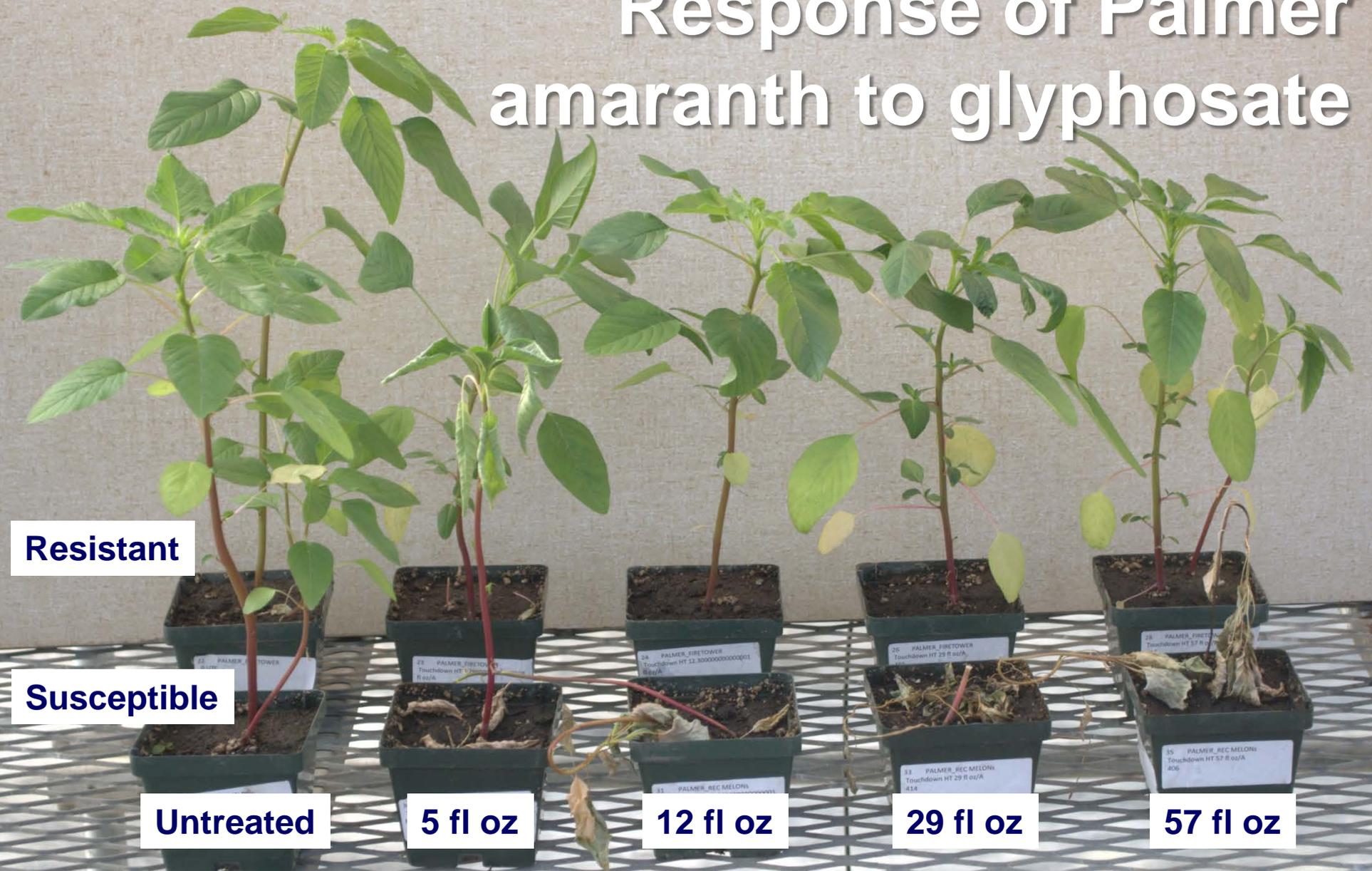


**Smooth pigweed**  
**Fine hairs on stem**

**Palmer amaranth  
watermarks are very  
distinctive –  
*but they are found on  
very few plants***



# Response of Palmer amaranth to glyphosate



**Touchdown Total plus surfactant was used**

**29 fl oz of Touchdown Total is similar to 1 qt of Roundup WeatherMax**