

# Evaluation of Blended Soilless Media/Poultry Litter Compost for Tobacco Transplant Production

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Daviess Co. KY

2015

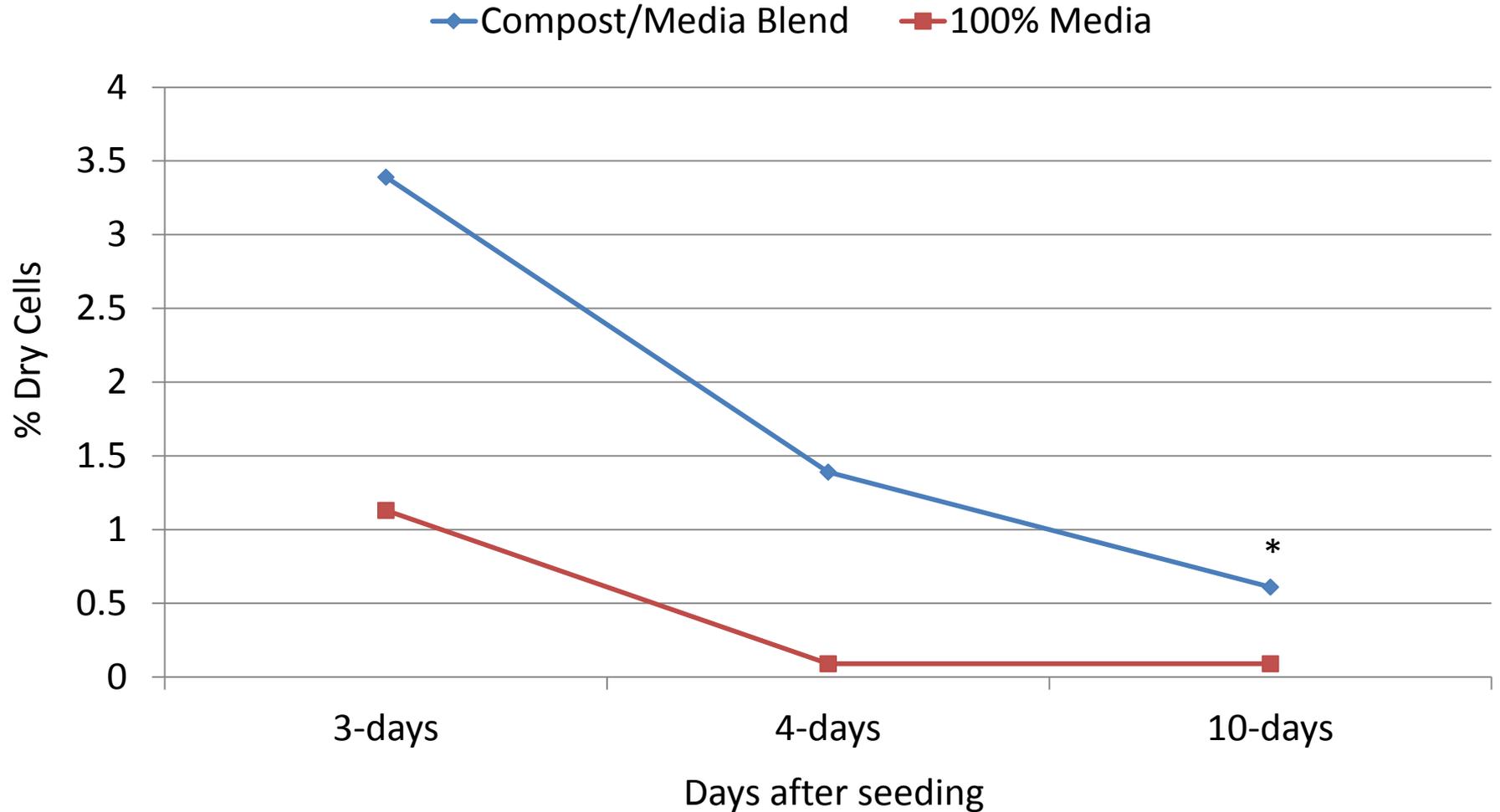
# Blended Poultry Litter/Soilless Media

UKREC, Princeton KY - 2015

- Blend contained 5 gal composted chicken litter to 1 bag Carolina Choice media (approx. 50/50).
- 288-cell trays sown with KT D14 at UKREC, March 20:
  - 4 replications (trays) per treatment, randomized on float bed
    - Composted poultry litter/media blend
    - 100% media
    - 100% composted poultry litter
- Data collected:
  - Wicking (dry cells)
  - 24-day germination and spiral rooting
  - Dry weight of water roots, tray roots, and shoots from 10 randomly selected plants from center of each tray

# Wicking (% Dry Cells)

Poultry Litter Compost Trial – UKREC, 2015



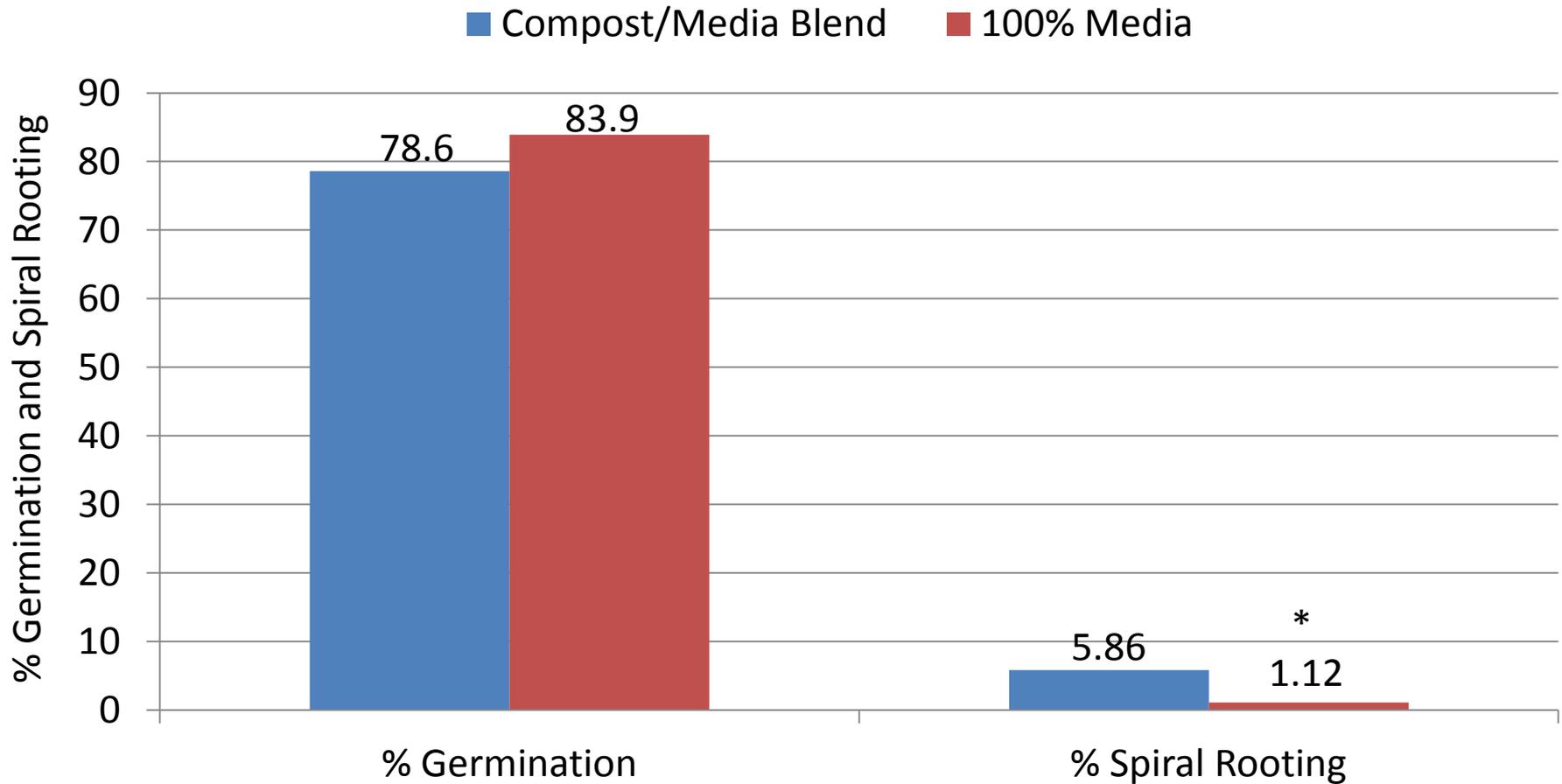
-All trays received light mist after 3-day and 4-day evaluations

-100% compost never wicked (100% dry cells)

\* = Statistically significant difference.

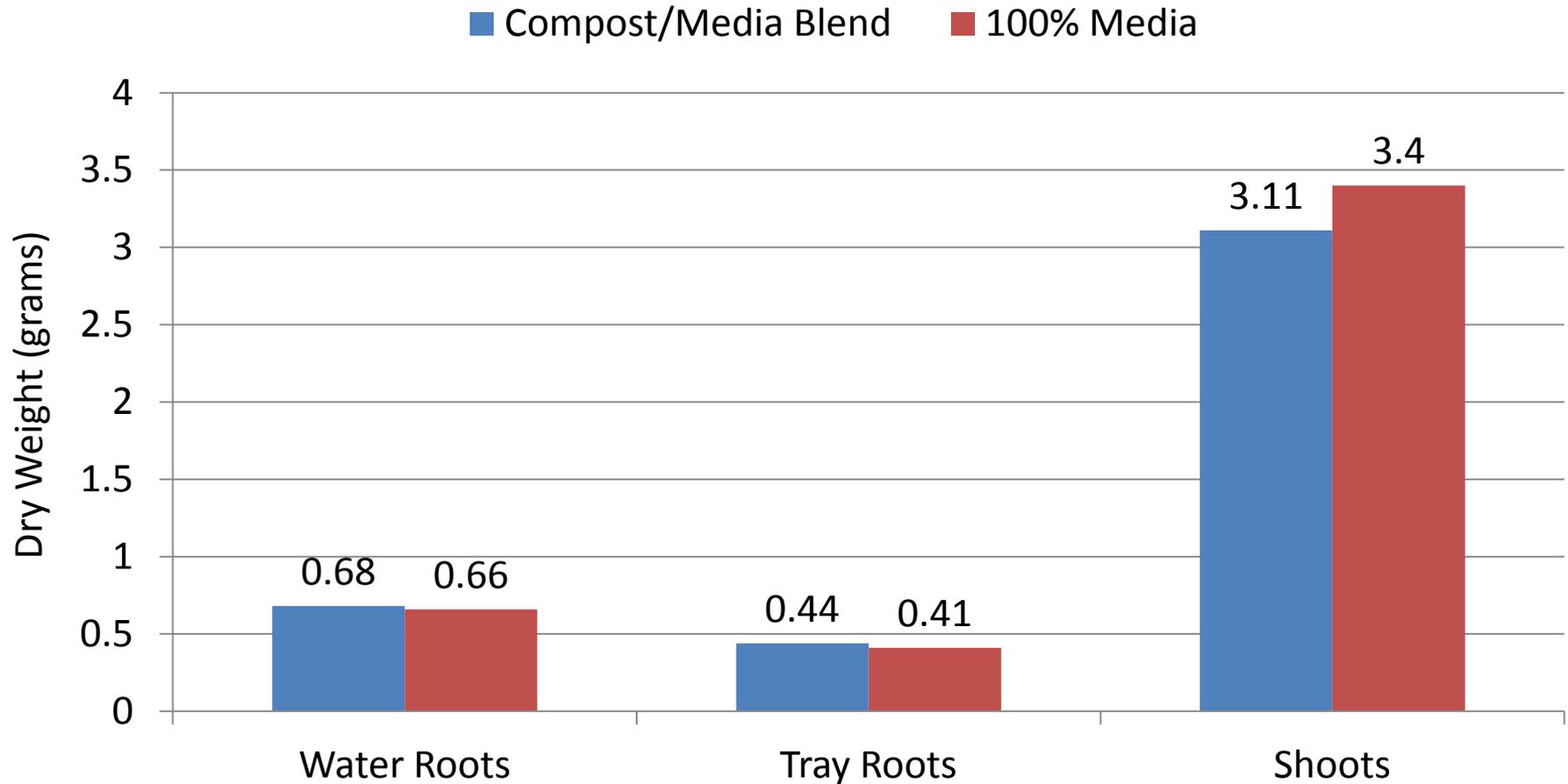
# 24-day Germination and Spiral Rooting

Poultry Litter Compost Trial – UKREC, 2015



# Dry Weights of Water Roots, Tray Roots, and Shoots

Poultry Litter Compost Trial – UKREC, 2015



No statistical differences in dry weights of roots or shoots.



100% Media



Composted Poultry Litter/Media Blend



**Composted Litter/Media Blend**



**100% Media**

# Poultry Litter Compost Field Trial

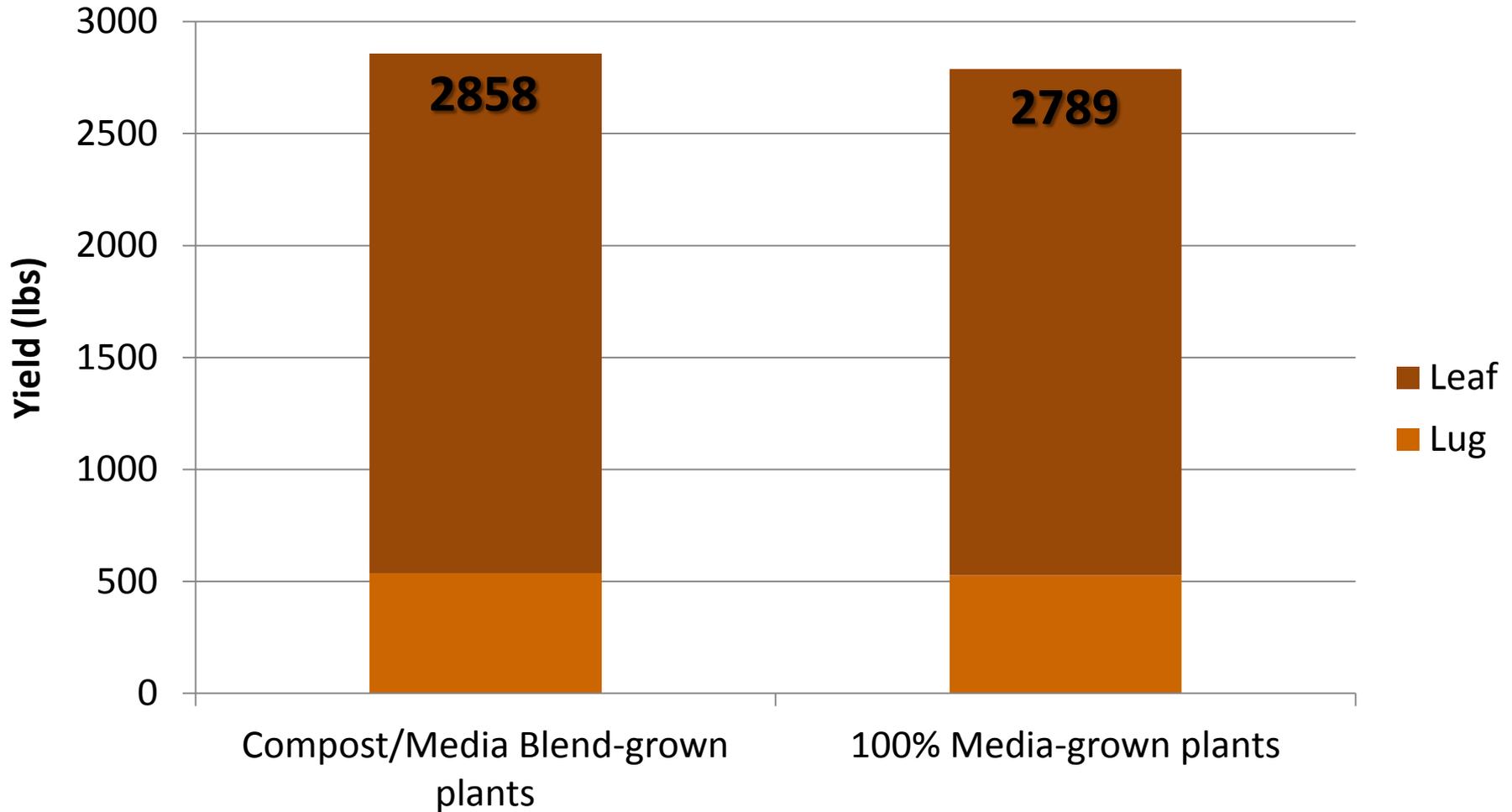
Bernie Krampe Farm, Daviess Co. KY -2015

- Trays transplanted to field on June 6
  - 40" rows \* 28" plant spacing (5601 plants/acre)
  - 2-row plots, 40 ft. long, 3 replications
  - Standard field practices used
  - Harvested September, Stripped November 12



# Poultry Litter Compost Field Trial

Bernie Krampe Farm, Daviess Co. KY -2015



No statistical differences between yield of compost blend- or media-grown plants.

# Summary of Poultry Litter Compost

- Slightly reduced wicking with compost blend resulted in a few more dry cells and increased spiral rooting compared to 100% media
- Yield of plants grown from compost blend or 100% media were similar in the field.