03-analysis

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Study count by different categories

Study count by **Principal Investigator**.

| pi | n |
|-----------|----|
| meyers | 53 |
| jennings | 37 |
| culpepper | 5 |
| vangessel | 4 |
| cohoon | 2 |
| cutulle | 1 |
| miller | 1 |

Study count by **sweetpotato variety**.

| variety | n |
|--------------------------|----|
| covington | 47 |
| beauregard | 45 |
| averre | 2 |
| evengaline | 2 |
| orleans | 2 |
| beauregard and covington | 1 |
| beauregard and orleans | 1 |
| hernandez | 1 |
| murasaki | 1 |
| NA | 1 |
| | |

Study count by **soil type**.

| soil_type | n |
|------------------------------|----|
| loamy_sand | 40 |
| $silt_loam$ | 40 |
| $\operatorname{sandy_loam}$ | 22 |
| NA | 1 |

Study count by **primary weed type**.

| primary_weed | n |
|-----------------------|----|
| Palmer amaranth | 56 |
| Yellow nutsedge | 11 |
| Broadleaf signalgrass | 9 |
| Readroot pigweed | 6 |
| Redroot pigweed | 6 |
| Crabgrass | 3 |
| Goosegrass | 3 |
| Palmer | 2 |
| Palmer / C. ragweed | 2 |
| Carpetweed | 1 |
| Common barnyard grass | 1 |
| Common lambsquarters | 1 |
| Slender pigweed | 1 |
| NA | 1 |

Study count by **irrigation type**.

| irrigation_type | n |
|-----------------|----|
| irri_overhead | 57 |
| non_irrigated | 45 |
| NA | 1 |

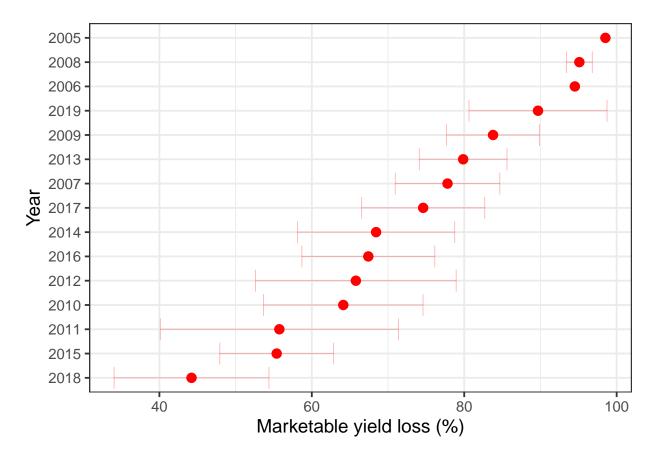
Study count by **location**.

| location | n |
|------------------|----|
| Clinton_NC | 47 |
| $Pontotoc_MS$ | 34 |
| $TyTy_GA$ | 5 |
| Faison_NC | 4 |
| Georgetown_DE | 4 |
| $Houlka_MS$ | 3 |
| Houston_MS | 2 |
| PAINTER_VA | 2 |
| $Blackville_SC$ | 1 |
| $Chase_LA$ | 1 |
| | |

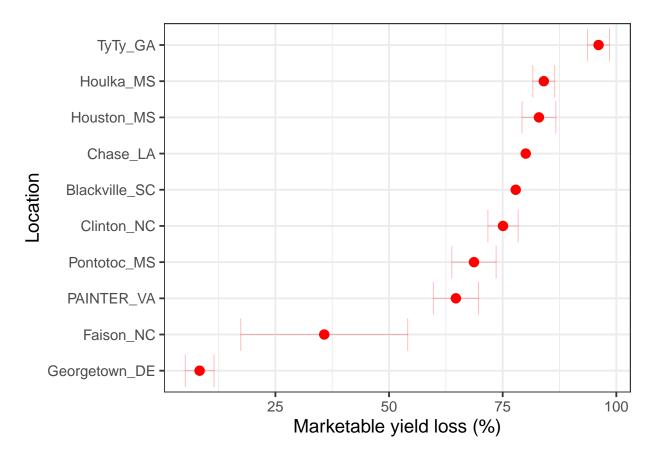
Figures

Distribution of marketable yield loss across 103 studies.

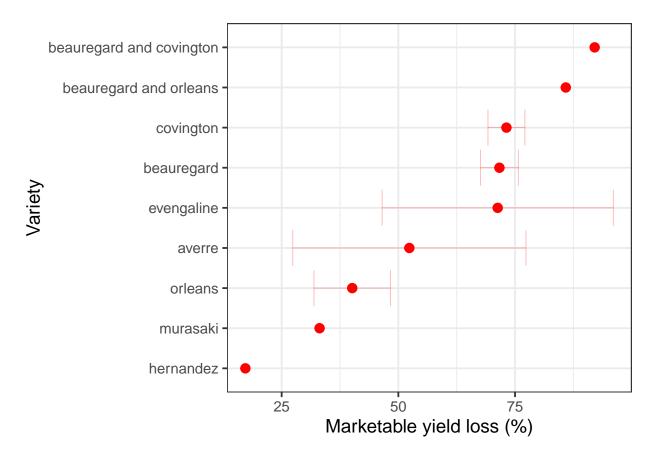
Average marketable loss by ${\bf year}.$



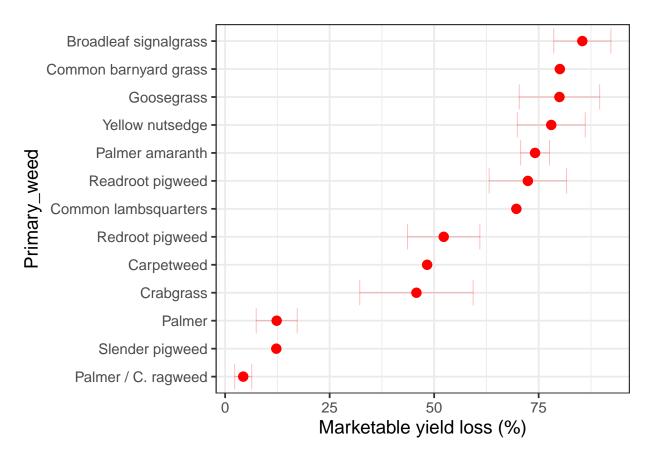
Average marketable loss by **location**.



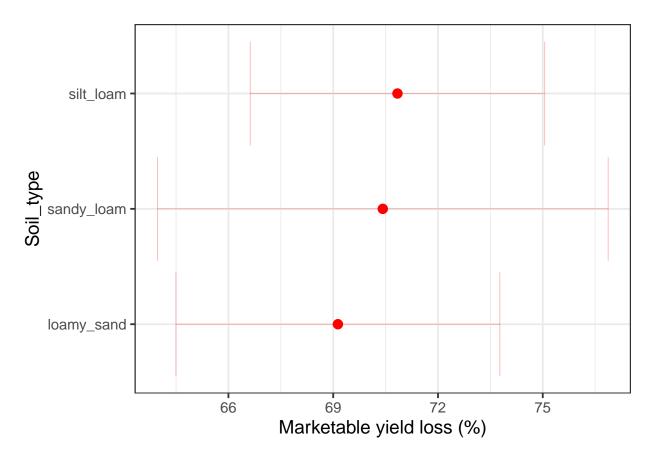
Average marketable loss by variety.



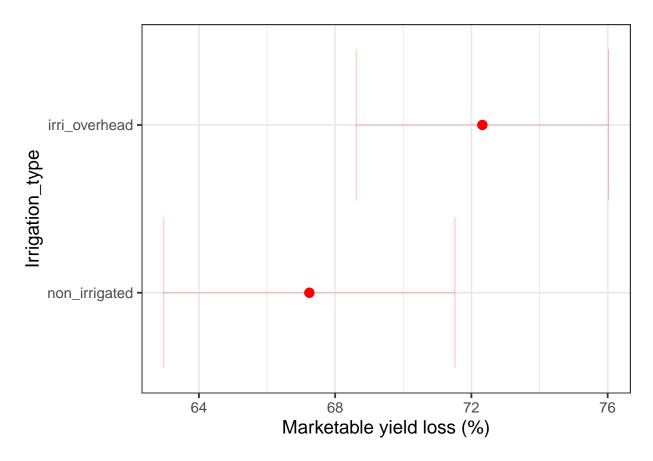
Average marketable loss by **primary weed**.



Average marketable loss by **soil type**.



Average marketable loss by irrigation type.



Create a table to report average marketable yield loss by state.

| state | marketable_loss | number_of_studies |
|----------------|-----------------|-------------------|
| North Carolina | 71.98863 | 51 |
| Mississippi | 70.60329 | 39 |
| Other States | 60.08924 | 12 |
| Louisiana | 80.07080 | 1 |

Mege above table with sweetpotato production and area harvested data from USDA NASS.

| State | Marketable loss (%) | Loss in \$s | Loss in cwt^1 | Number of studies | Harvested (acres) | Production i |
|----------------|---------------------|-------------|--------------------------|-------------------|-------------------|--------------|
| Louisiana | 80.1 | 35231150 | 1761558 | 1 | 8300 | 4400 |
| Mississippi | 70.6 | 57824096 | 3212450 | 39 | 26000 | 8190 |
| North Carolina | 72.0 | 188294912 | 7911551 | 51 | 78500 | 261563 |
| Other States | 60.1 | 40133603 | 1400680 | 12 | 10300 | 6679 |

 $^{^{1}\}mathrm{One}\ \mathrm{cwt} = 100\ \mathrm{lbs}$