The Girasoles Study

A study of agricultural workers aimed to characterize physiological response to working in hot conditions (2015-2017)

Demographics of Workers

- **Age**: 38 average
- **Years in Agriculture**: 12 average
- **Hours Worked**: 8 average
- **Days Worked**: 5 average

Proportion of Day Spent in Activity Level

- Moderate to Vigorous: 61%
- Female: 62%
- Male: 38%
- Female 38%
- ≥38°C 90%
- <38°C 10%

The odds of Acute Kidney Injury increased 37% for each 5 degree(F) increase in mean heat index.

Dehydrated 53% before work

Dehydrated 81% after work

Workers had acute kidney injury 36% on at least one workday

Primary Work Types

- Fernery: 50%
- Nursery: 40%
- Crop: 10%

Florida Communities: 5

Ambient Temperature: 84°F average

Relative Humidity: 76% average

Heat Index: 90°F average

Fernery Nursery Crop

Demographics of Workers before work

- # of Symptoms
  - Core Body Temperature
    - ≥38°C 90%
    - <38°C 10%
  - Gender
    - Female 62%
    - Male 38%
  - # of Symptoms
    - ≥3
    - ≤2
    - >2
  - Hours Worked
    - 8 average
  - Days Worked
    - 5 average
  - Work Hours
    - Proportion of Day Spent in Activity Level
      - Moderate to Vigorous
      - Female: 62%
      - Male: 38%
  - Age
    - 38 average
  - Years in Agriculture
    - 12 average
  - Ambient Temperature
    - 84°F average
  - Relative Humidity
    - 76% average
  - Heat Index
    - 90°F average
  - Dehydrated
    - 81% after work
  - Worked
    - Dehydrated
      - 81% after work
  - Worked
    - Core Body Temperature
      - ≥38°C 90%
      - <38°C 10%