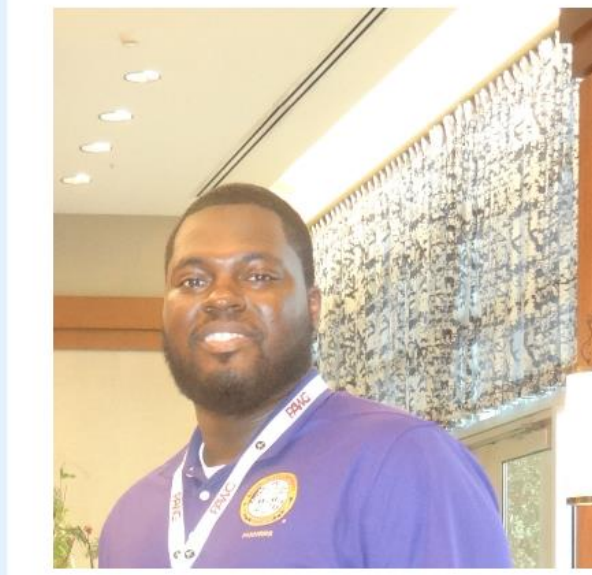


Intercropping Flowering Plants With Watermelons

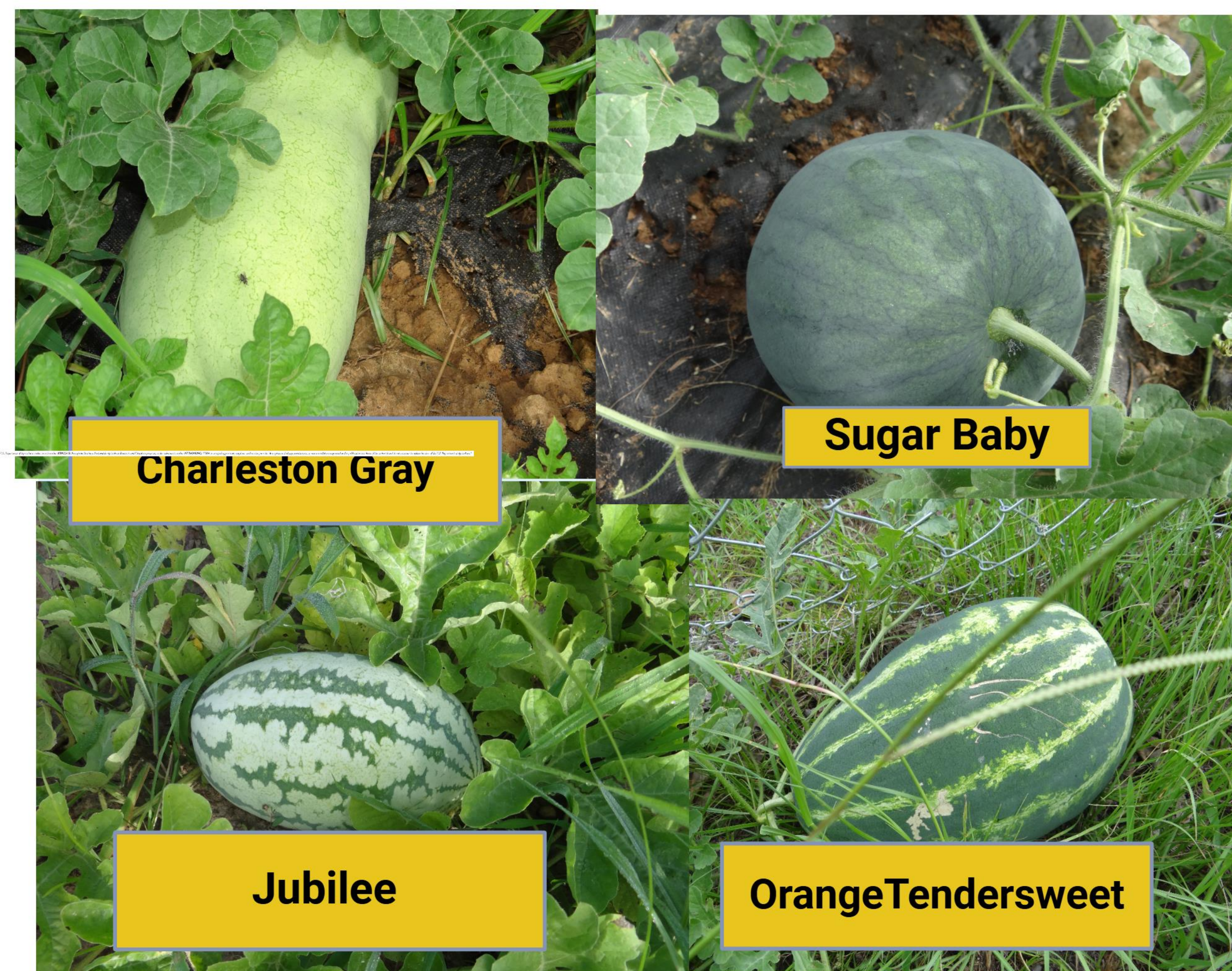


TreDarius Clifton , Drs. Daniel Collins, and Tahir Rashid Alcorn State University Lorman, MS USA

Flowering Plants as a Habitat for Pollinators For Sustainable Crop Production

Watermelons (*Citrullus lanatus*) are an important fresh market crop worldwide. In 2023 the US watermelon market was valued at approximately \$748 million. Pollinators are essential for our environment and crop production systems. Over seventy percent of the world's flowering plants, including two thirds of the world's crops species such as watermelons depend on pollinators to reproduce

Loss of habitats for pollinators is a threat to the sustainability of farming and global food security. The objective of our research is to evaluate a diversity of flowering plants intercropped with watermelons to attract a variety of pollinators including honeybees and native bees to enhance pollination and fruit development and quality of watermelons.



Watermelon cultivars used in study

- **Watermelons Cultivars:** Four varieties that were selected for the study: Sugar Baby (small round variety), Charleston Gray (large long oval variety), Jubilee (large long variety), Orange Tendersweet (mid sized variety).

❖ Flowering plants selected for intercropping with watermelons.

1. Zinnia- attracting a variety of pollinators
 2. Sunflowers- pollinator friendly plant
 3. Okra- Producer of large nectar rich flowers
2. Bee Monitoring- Two bee vane traps were placed in both locations

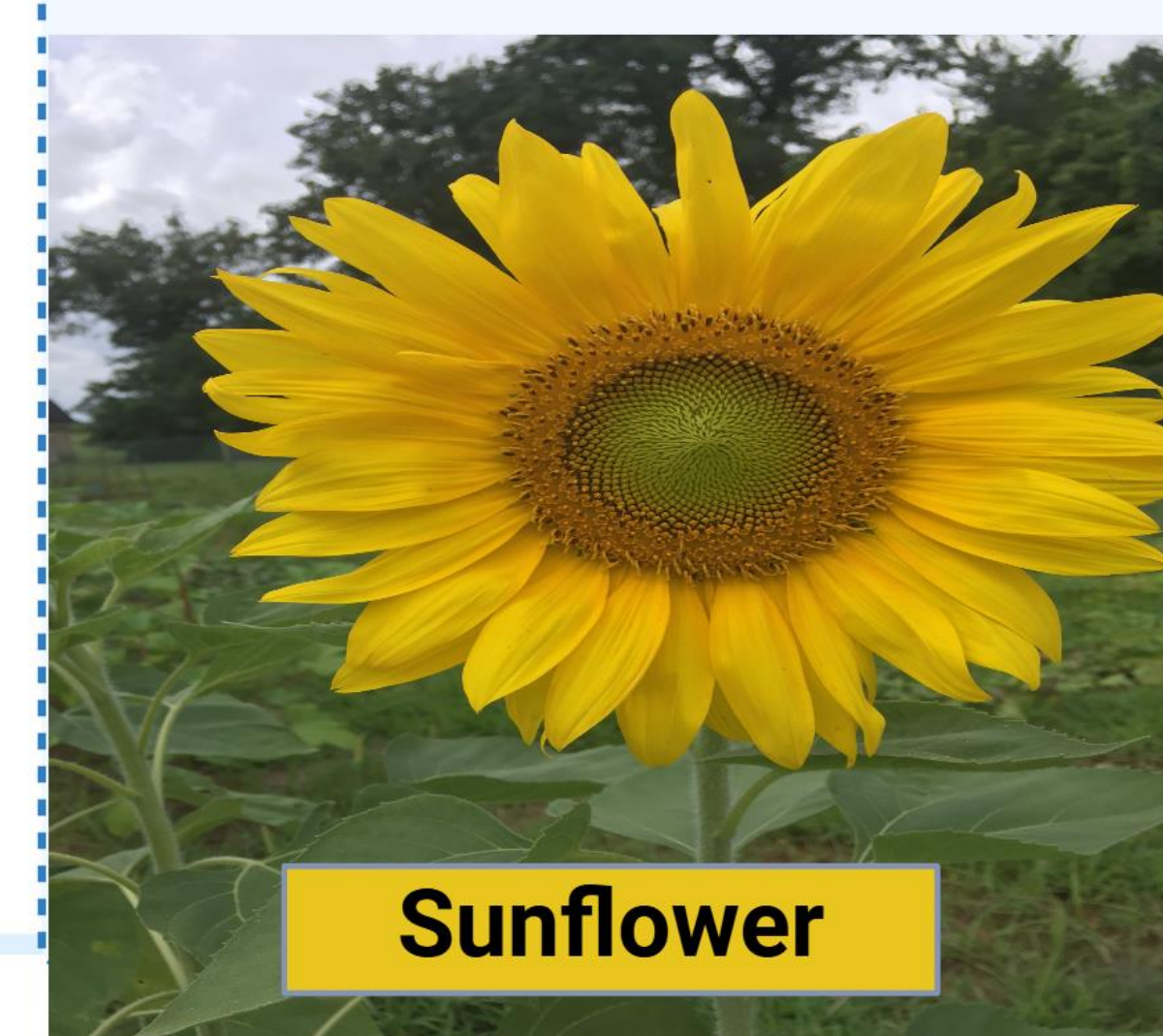
Flowering Plants



Okra

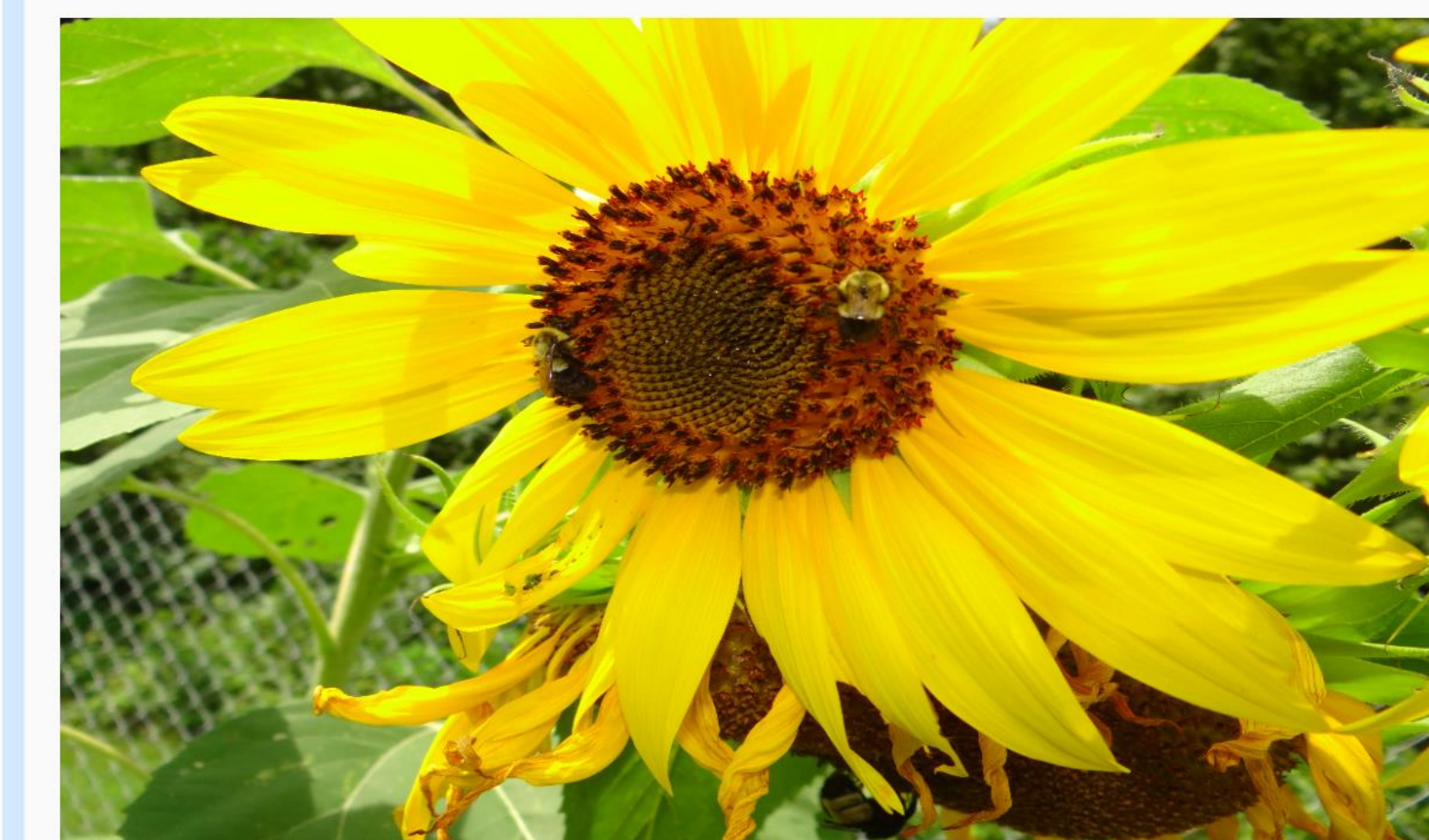


Zinnia

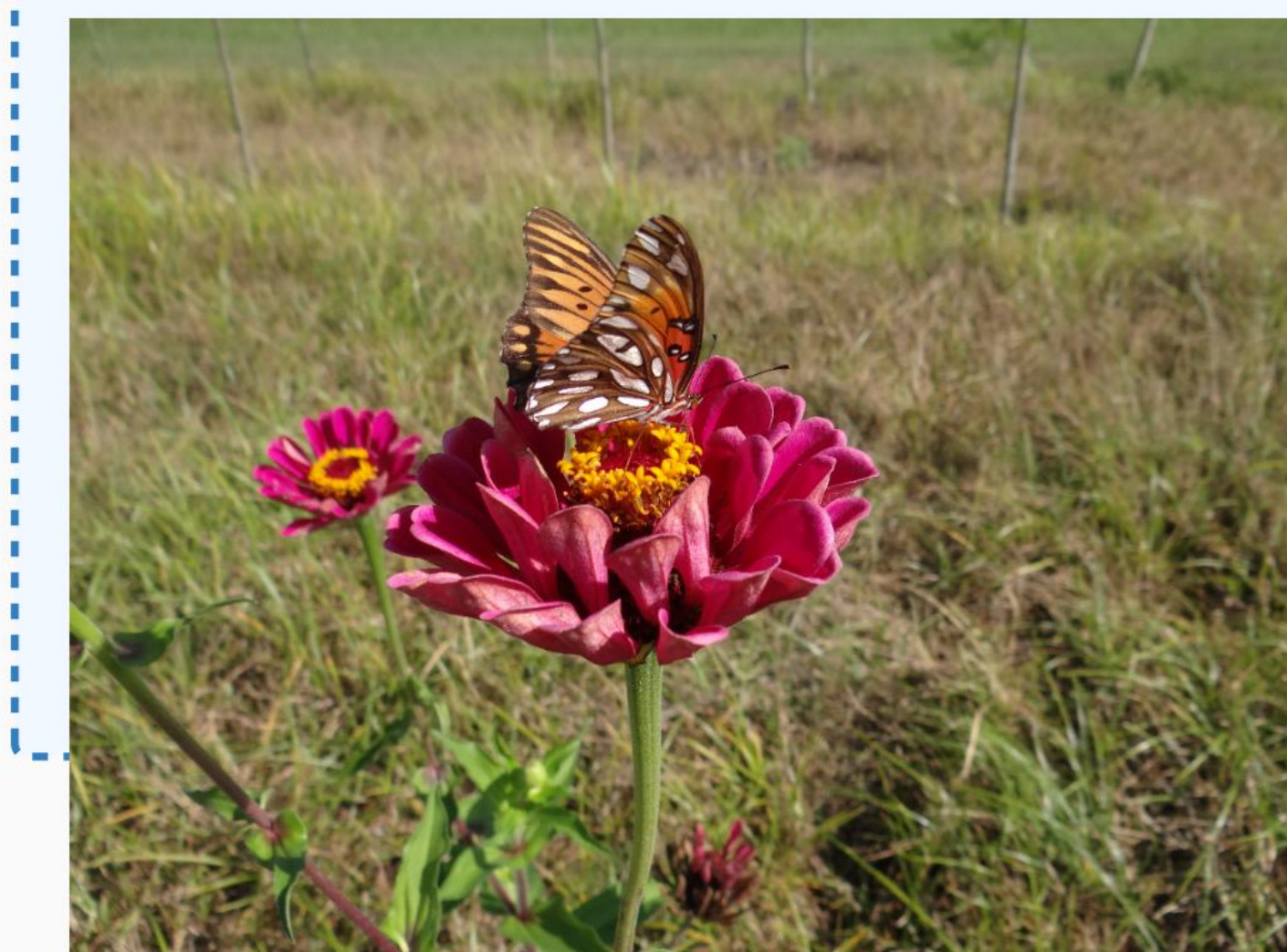


Sunflower

Diversity of Pollinators visiting Flowering Plants



Bumblebee visiting sunflower



Butterfly visiting Zinnia flower



Paper wasp

Insect Pollination of Watermelons Needed for Fruit set , Quality, and Yield

