

# Bitter Eggplants in the Field

## BACKGROUND

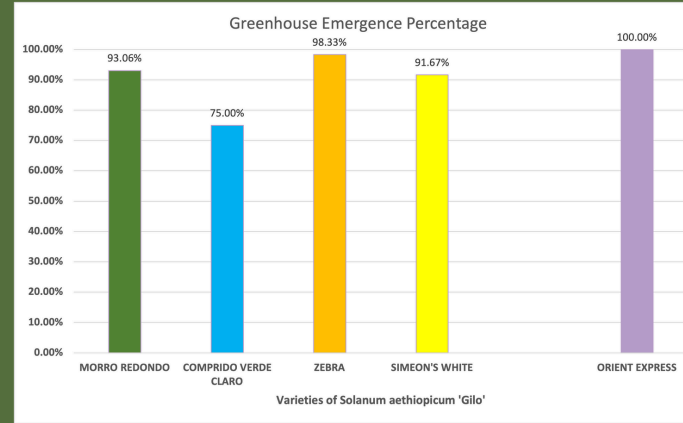
While some people may view bitterness as undesirable, it can be associated with stimulating digestion, enhancing liver function, and providing antioxidants. In many cultures, bitter flavors are appreciated and play a vital role in traditional dishes, showcasing the complexity of taste.

*Solanum aethiopicum*-- gilo, garden egg, beetim, jiló, djakattou, nakati, bitter tomato, scarlet eggplant, rotonda red eggplant or African eggplant-- is a valuable culinary and agricultural crop for its cultural significance, nutrition, bitter flavor, adaptable growth, and genetic diversity.

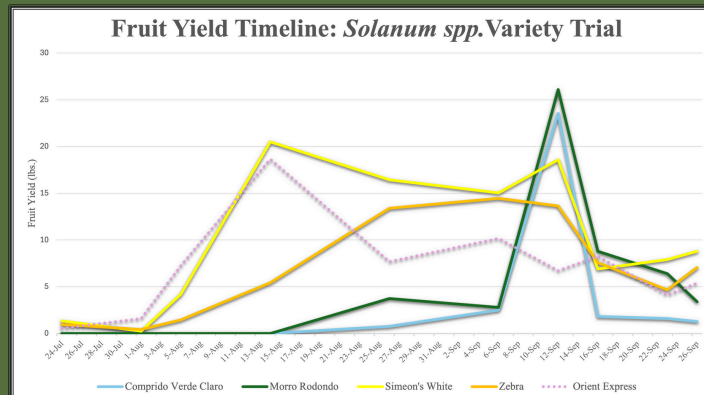
Student researchers aim to bring awareness to this culturally significant crop, evaluate its adaptability to the Pacific Northwest climate, contribute to public agricultural data, and facilitate food sovereignty. Students evaluated germination, seedling vigor, and fruit yield in an organic farm system using *Solanum aethiopicum* varieties 'Comprido Verde Claro', 'Morro Redondo', 'Simeon's White', and 'Zebra' compared with a cold-tolerant and stress adapted *Solanum melongena* var. 'Orient Express' all from U.S. seed producers.



## DATA RESULTS



All seed varieties produced viable plants and fruits. In this study, 'Simeon's White' appeared to show statistically significant measurements of seedling vigor--plant height and leaf dimensions-- when compared to the lesser, Morro Redondo. Interestingly, Tukey HSD tests on the last height data set shows relevance between height based on seed company; 'Morro Redondo' and 'Comprido Verde Claro' are not significantly different, nor were the 'Simeon's White' and 'Zebra', but all other pairs were statistically significantly different. Additionally, 'Simeon's White' showed the highest cumulative yield over the nine week season.



# GARDEN EGG

*Solanum aethiopicum*



The Evergreen State College's "bitter eggplant" variety field trial.

# Vegan Ghanaian Garden Egg Stew

Adapted from a recipe by Afia at The Canadian African (thecanadianafrican.com)

Serves: 3

Prep Time: 10 minutes

Cooking Time: 30 minutes

Total Time: 40 minutes

## Ingredients:

- 20 Garden Eggs (Can use more or less depending on preference)
- 2 Medium Onions (1 finely diced, 1 roughly chopped)
- 3 Tomatoes
- 1/2 Red bell pepper
- 1 scotch bonnet pepper
- 3 cloves of garlic
- 1 thumb sized amount of ginger
- 2 T of red palm oil
- 1/4 cup of tomato paste
- 1 tsp of better than bouillon paste
- 2 tsp of curry powder
- salt and pepper to taste

## Instructions:

1. Cut the tops of the garden eggs, then cut them in half.
2. Boil the garden eggs in a pot of salted water for 15-20 minutes till soft.
3. Drain and set aside the garden eggs to cool down.
4. In another pot at medium heat, sauté the diced onions in the red palm oil until soft.
5. While the onions are sautéing, blend the other onion, garlic, ginger, tomatoes, scotch bonnet pepper, and bell pepper.
6. Add the tomato paste to the sautéed onions and simmer for about 2-3 minutes.
7. Add the blended mixture into the pot with the sautéed onion and tomato paste and let everything simmer at medium heat for 10 minutes.
8. After the 10 minutes, add the curry powder and better than bouillon paste and let the stew continue to cook until thickened, about 10 minutes.
9. While the stew is cooking, you can remove the seeds from the garden eggs to reduce the stew's bitterness. This is completely optional.
10. Chop the garden eggs a little bit and then add them to the sauce. Lower the heat and let the garden eggs simmer for about 5 minutes.

## Notes:

Garden egg stew is traditionally served with boiled yam and plantains, but is also delicious with sourdough. For added plant-based protein you can add tofu or beans to the stew along with the garden eggs.

# BITTER EGGPLANT CHIPS

## Ingredients:

- Sea Salt - 3 T
- Cooking Oil- 1/4 cup
- Trehalose Sugar
- 1 full baking sheet of Bitter eggplant, *Solanum aethiopicum*



**Instructions:** Slice the eggplants to ~ 1/8 inch thick with a mandolin, lightly coat with oil, and layout over a baking tray. Sprinkle salt and trehalose sugar. Preheat oven to 150 degrees Fahrenheit, and turn on internal fan to its highest setting. Place tray in the oven for 5-7 hours, occasionally testing by bending a chip; when dry (roughly 10% original moisture) they will break cleanly. After this texture is achieved, they are ready for storage. It takes about 4 trays to fill a gallon bag, then freeze until ready to be eaten.

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Did you know that *Solanum aethiopicum* is thought to have medicinal properties? Pictured above is its Indigenous relative, *Solanum incanum*, 'bitter fruit', which is used for tooth aches by the Maasai people in the East Serengeti.