

# Bitter Melon

## (*Momordica charantia*)



Cody Dailey

# Classification

- Genus: *Momordica*
- Species: *M. charantia*
- Family: Cucurbitaceae, they may also be referred to as the “gourd family”. They consist of about 975 species. They are sensitive to frost and many have yellow or white flowers that blossom from them. The stems are hairy and pentangular. The leaves are simple palmately lobed or palmately compound.
- Other Family Members: squash, pumpkin, watermelon, cucumbers, and luffa



# Morphological Description

- It is a herbaceous tropical/subtropical vine plant.
- The vines can grow up to 5m long
- It bears simple alternate leaves that range from 4 -12cm across
- The yellow male and female flowers are borne separately on the same plant and require insects for pollination. The male flowers are only open for 1 day.
- The fruits has a pebbly surface with long smooth ridges.
- During the immature phases of the melon the color is green and the taste is the most bitter compared to that of a mature melon.
- Finally, once the melon has reached maturity, it becomes a dark red orange in color
- Fruits can be up to 30cm long



# Features of Cultivation

- The melon cultivated for the full use of the plant other than its pith.
- Seeds need to be soaked over night prior to planting. Soil should be fertile but well drained with a pH of 5.5 to 6.7.
- The plant thrives in high heat and humidity. Its very sensitive to temperature and will die if exposed to frost.
- Its best to trellis the vines on a fence, this helps keep the fruit from rotting.
- When growing the melon it is important that the moisture of the soil remains even to ensure continuous and vast growth of the vine and high yield(10-12 fruits per vine)
- The fruit is ready for harvest once it's a light green with a hint of yellow. This is usually 8-10 days after flowering.
- It is subject to disease and attacks from beetles and fruit flies



# Plant uses

- Bitter melon is a strong culinary food. It's usually consumed when cooked in the green or early yellowing stage.
- Its very popular in stir fries, yogurts, and soups.
- There are many traditional medicinal uses for the bitter melon.
- Bitter melon is used for various stomach and intestinal disorders including upset stomach, ulcers, colitis, constipation, and intestinal worms. It is also used for diabetes (to help lower fasting blood sugars), kidney stones, fever, psoriasis, and liver disease; to start menstruation; and as supportive treatment for people with HIV/AIDS.
- Bitter melon should not be used in pregnant women because it can induce bleeding, contractions, and abortion.





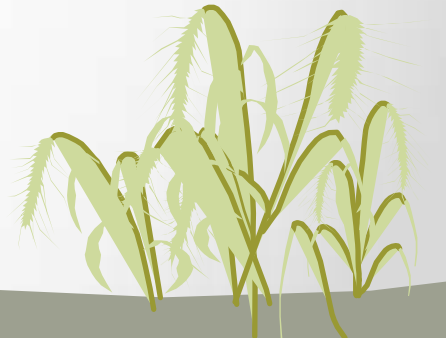
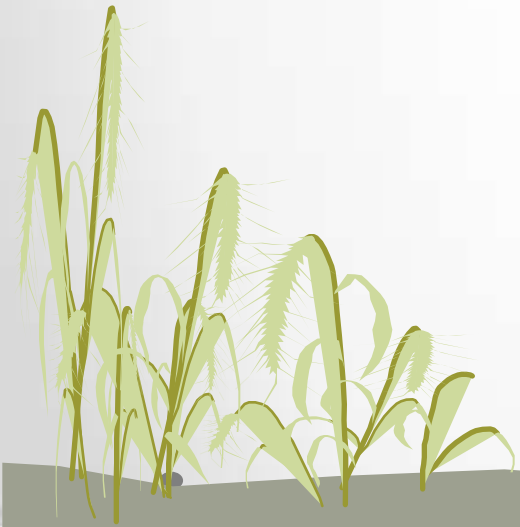
# Historical Facts

- Native to tropical Asia, the bitter gourd has a long history dating back to about 600 years in China
- it was used as a folk remedy for curing tumors, asthma, skin infections, GI problems, and hypertension
- the medicinal benefits of bitter gourd were highly treasured in India, Africa, and southeastern parts of the U.S as well.



# Use in North America and of Native Americans

- Main use is for food and medicinal use.
- Its known to grow down along the gulf coast of Florida.



# Interesting facts

- It acts like insulin by forcing amino acid uptake into skeletal muscle tissue ( which is beneficial for diabetics and body builders)
- The fruits of bitter melon have been used as a substitute for soap to wash clothes in Columbia and Cuba
- Soaking bitter melon in salt water helps get rid of some of the bitter taste.
- Bitter melon is also known as balsam pear
- The red arils that cover the seeds of bitter melon are poisonous to humans
- “Bitter is Better”





# References:

- [http://en.wikipedia.org/wiki/Momordica\\_charantia](http://en.wikipedia.org/wiki/Momordica_charantia)
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- [http://www.ctahr.hawaii.edu/sustainag/extn\\_pub/veggie%20pubs/Bitter%20Melon.pdf](http://www.ctahr.hawaii.edu/sustainag/extn_pub/veggie%20pubs/Bitter%20Melon.pdf)
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