

# **Grower2Grower Project**



Kamal Mustafa Jonesville Allotment Garden



Kamal is an agriculturalist from Bangladesh. Other than his elder brother, he doesn't come from a family of farmers. He studied agriculture at university and considers it his hobby. He is a member of ABACAN, the Association of Bangladeshi Agriculturalists in Canada.





# Grafting eggplants, tomatoes and potatoes

What if you could grow a plant that produces more than one kind of food?

Kamal is experimenting with grafting eggplants and tomatoes onto potato stock. This creates a plant that produces both potatoes and either eggplants or tomatoes – 2 for 1! And, as you can see, he is growing them in shaded areas. Kamal selects specific varieties for success.



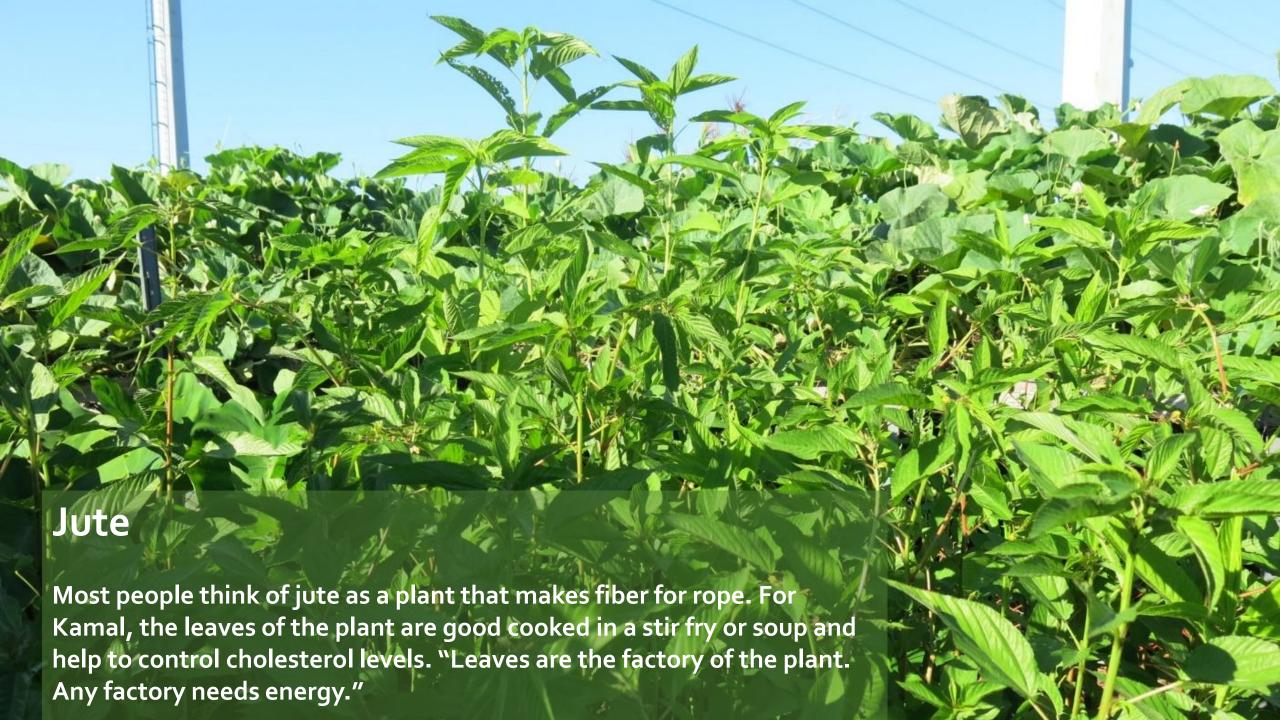


**Eggplants and tomatoes** 

You can see the graft just above the soil



According to Kamal, Russia, Germany and England tried to commercialize grafted vegetables in the 1960's, but they were not successful. Kamal says his community is very interested in buying the plants and he can get a good price for them.



#### Taro

Plants from the taro family have edible stems, leaves and tubers. I've heard that taro, eddo and dasheen are all different names for the same plant. When I asked Kamal this, he explained that they are different plants from the same family. Eddoes tend to be bigger than taro.



### Growing

Start a taro plant by putting a root into plastic bag. Kamal says it's not very humid in Toronto, so you need to keep the root moist. When the sprouts grow, you can put them in soil. As they grow, harvest the side stems. The middle stem will grow and give you new leaves every 2 weeks. If you cut the middle stem first, it will come back but it will grow much slower.

### **Preparing**

You can eat the stem and leaves throughout the growing season, then harvest the root in the fall. Boil, mash & stir fry the taro with whatever spices you like.

To preserve the greens, steam them just for a minute, then pack them into bags and put in the freezer. You can freeze bottle gourds and jute leaves the same way.



## **Bottle gourds**

Kamal grows eight varieties of bottle gourd. His favourite variety (shown to the right) is very tasty and tender, and it flowers early.

Kamal tells me I'm arriving too late, the gourds are not at their best. Earlier in the season he had 56 gourds growing at one time!

Bottle gourds are said to be good for soothing stomach ailments.



Kamal saves gourd seeds and starts them in his apartment under fluorescent lights. He trains them around electrical wire so that they grow 3-4 feet tall indoors. When the time comes to transport them, he can bend the wire without breaking the stems so he can get them in his car. When he plants them in the ground, he removes the wires and the plants are free to grow – and they flower much earlier than the gourds in his neighbours' gardens.





Left: male bottle gourd flower Top right: female bottle gourd flower Bottom right: male bottle gourd flower with mature pollen

Gourds with white flowers tend to bloom 1 hour or so before sunset. Since pollinator activity is slow at that point and pollinators prefer brightly-coloured flowers, it's best to pollinate the flowers by hand. To do this, you need to find a male flower with mature pollen, detach it and connect it to a female flower. They should be same-day blooms.





Kamal also grows a Sicilian variety of gourds and is cross-breeding them with varieties he brought here from Bangladesh.

He says that, when you first cross two varieties, the seeds won't come true. You'll see heterogeneous gourds, or ones with very different characteristics. If you use pure line selection and choose seeds from the gourds that have the characteristics you want, after 4-5 seasons the gourds will become homogeneous and show the same desired traits again and again.





## Preparing kale

Kamal likes to chop the kale finely and then add lemon juice, olive oil, salt, pepper and some seeds (like sunflower or pumpkin). Refrigerate it overnight and enjoy the next day!

## Kale and succession planting

Kamal buys kale plants rather than starting them from seed. The crop pictured here is the third crop grown in this space this season. First Kamal planted peas here very early in the season and harvested them for the leaves. They're very tasty in salads!

Then Kamal removed the peas and planted a crop of red amaranth. When the amaranth grew to 1-2 feet, he harvested it and put in a crop of kale plants. With each new planting, Kamal added another layer of black earth to maintain soil fertility. Planting peas as the first crop is good because peas fix nitrogen in the soil, which provides food for the next crop.



#### **Amaranths**

Kamal is breeding amaranths to grow in the shade. By selecting and planting seeds from the strongest plants in the shade, they will become more and more shade tolerant. The plants in this photo still get morning sun. Every year, Kamal will move them to a slightly darker space to get them used to low light conditions.

Kamal is particularly excited about red amaranths. They are a highly nutritious variety — "given by God." It's mildly cold tolerant, so you can plant it as a first crop. When it has grown to 1-2 feet, you can harvest it and plant the next crop.

# For more tips and stories from urban growers in Toronto, see www.torontourbangrowers.org/grower2grower



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