

Garden Highlights, October 2016

The UN has declared 2016 to be the International Year of Pulses (IYP). Pulses are the edible dry seeds of the pea (legume) family of plants. As these seeds are a significant, inexpensive source of protein and other nutrients, they are widely eaten, especially by people in the third world. They are also used in feed for farm animals.

Pulses can be used to improve the soil they grow in, by adding nitrogen. This nitrogen is taken from the air by bacteria living in the plant's roots. To ensure a good yield, pulse crops need to be inoculated with bacteria, if there hasn't been a recent pulse crop that uses the same bacteria.

The gardens have a display of pulses growing in the central bed. Spring has brought them into flower. As each flower finishes, the pod and its seeds begin to develop. The seeds are harvested when mature and dry. Can you see any developing pods?

1 & 2. **Field Peas or Green Peas *Pisum sativum*** are sold as split peas or green peas. In 1866, Gregor Mendel discovered the laws of genetic inheritance that revolutionised plant and animal breeding. For his experiments he used field peas that produced yellow and green seeds.

3. Most Lupin seeds contain bitter poisons, so they need careful preparation. During the 1960s, Australian scientists domesticated ***Lupinus angustifolius*** to create the **Australian Sweet Lupin** a sweet-seeded version of its wild relative. Lupin meal is used to enhance the nutrition of foods, including baked food, pasta and weight-loss food. Australia is the world's largest producer of Lupin seeds (0.8 million tonnes pa).

4. **Faba Beans or Broad Beans *Vicia faba*** are grown for human consumption and animal feed. Australia exports these beans to the Middle East, the Mediterranean and Japan. This crop grows well in Southern Australia and copes well with alkaline soil, like that here in the gardens.

What's on in October 2016

Exhibition closes 8 October: 'Form and Flora', Boom Gallery, Newtown.

Open Garden: Gherang Gardenalia, Weekend 8 and 9 October, www.opengardensvictoria.org.au.

Discovery Walk : 'Discover Eastern Park', Sunday 9 October 2:00 pm. Gold coin donation.

'Fungi of the Great Otway National Park', Tuesday 11 October 7:30 pm <http://www.gfnc.org.au>.

Discovery Table, Sunday 16 October 1:00 - 3:00 pm.

Friends Spring Plant Sale, Weekend 29-30 October 10:00 am – 4:00 pm.

The Friends' Nursery is open on Wednesdays 9:30 am - 12:30 pm.

Free Guided Walks, each Sunday 2:00 pm, Wednesday 11:00 am.

The Curiosity Cabinet is displaying 'Super foods' and pulses.

The Tea House is open every day.



1.



2.



3.



4.

Over page: Map showing these plants

www.friendsgbg.org.au

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Geelong Botanic Gardens Map

Pulse crop in the 'paddock'



- 1 & 2. Field Peas or Green Peas *Pisum sativum*
3. Australian Sweet Lupin *Lupinus angustifolius*
4. Faba Beans or Broad Beans *Vicia faba*
Chickpeas *Cicer arietinum*