What is a Domesticated Plant?

Reproductive success depends on human intervention.

Approximately 250,000 living species of flowering plants

- Six species provide 80% of calories consumed by humans worldwide.
  - Wheat, rice, corn, potato, sweet potato, and cassava
- Eight additional plants complete list of major crops grown for human consumption.
  - Sugar cane, Soybean,
  - Sugar beet, Barley,
  - Bean, Sorghum,
  - Coconut, Banana
**Origins of Agriculture:**

- Agricultural practices arose independently in many parts of the world.
- People began to domesticate plants in Near East (Iran) around 10,000 years ago.
- First crops were cereal grains.
  - Root crops and legumes domesticated 1,000 to 2,000 years later.
  - Followed by vegetables, then oil, fiber and fruit crops
  - Plants for forage, decoration, and drugs first domesticated about 2,000 years ago.

**Figure 14.2**

Interdependence.

Corn – domesticated in the New World.

Now requires humans for cultivation.
Figure 14.28

Explants
Micro-propagation
From cultured tissues.
Rapid proliferation
due to utilizing cell
Totipotency.*

Totipotency – the capacity of a cell to give rise to any structure of a mature organism – has all the genetic info within cells already.