Worldwide distribution
Tropic, grasslands, temperates, deserts, cold latitudes
Evolution linked to evolutionary diversification of insects
Oldest angiosperm is 125-m.y.-old Archaefructus
Ecologically (and agriculturally) important
Synapomorphies
1. Flowers
   a. Produce both pollen and seeds
      (i) Seeds with carpel; pollen on stamen
      (ii) Flowers can mature into fruit
2. Vessel elements

*All fruits come from flowers but not all flowers have fruits
Flowers produce both pollen and eggs
Traditional Angiosperm Groups
Cotyledon
Embryonic "leaves" produced within seed
Dicots
Two cotyledons
Paraphyletic group of most angiosperms
Monocots
Single cotyledon (reduction from two)
Monophyletic group
Grasses, wheat, corn, rice, sugar cane, barley, rye, other major cereal crops
Monocots are a clade within the angiosperms, while dicots are paraphyletic