

Growing and Using Corn

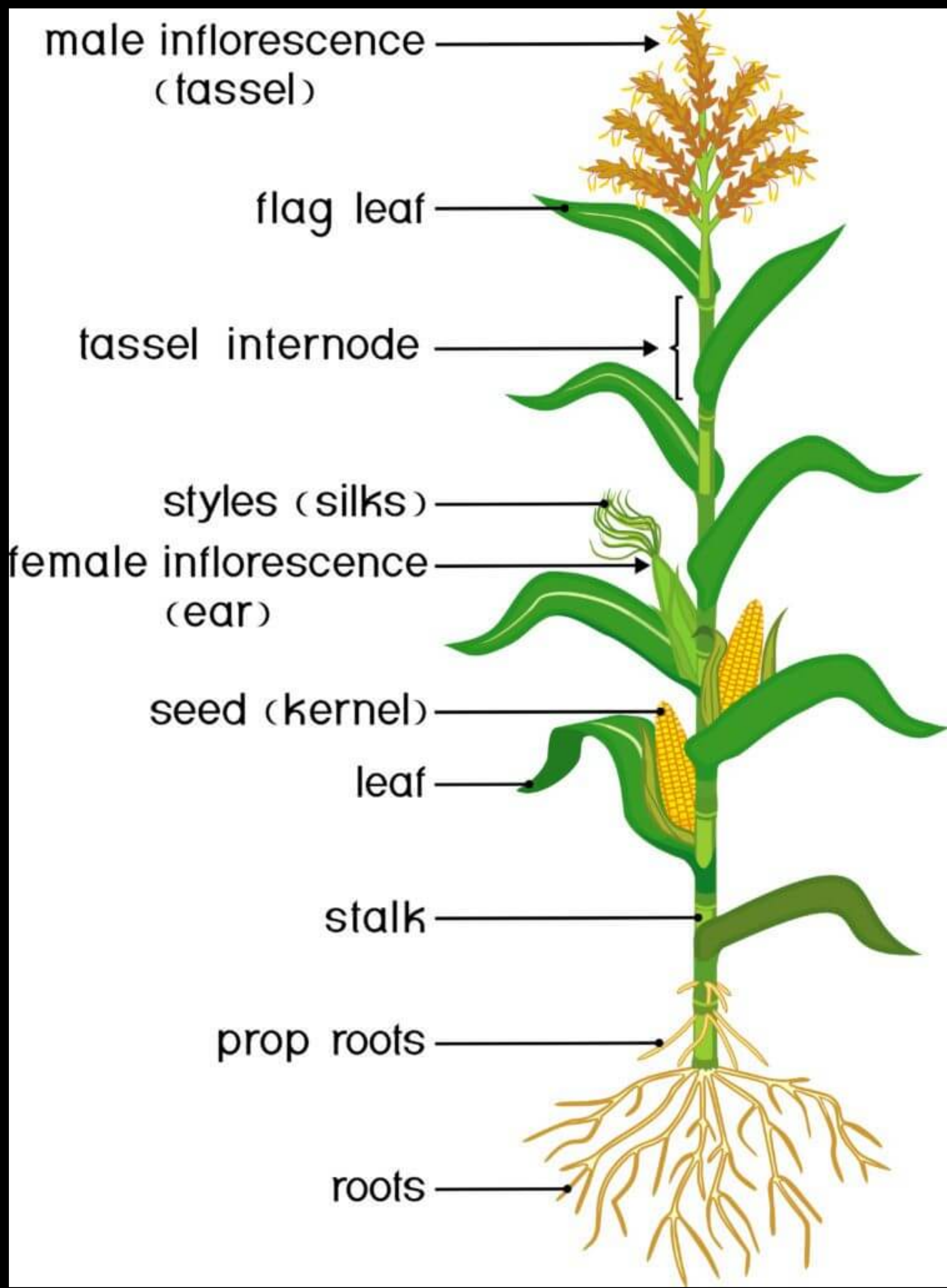


Sweet Corn

- Harvested much younger (milk stage)
- Bred for sugar content and slow conversion of sugar to starch after harvest, also for texture
- Has more sugars, less starch, at mature stages
- Stalks usually around 6 ft. tall

Field Corn

- Harvested at full maturity (black layer stage)
- Bred for kernel size and number
- Stalks can be as tall as 15 ft.



Growing Field Corn

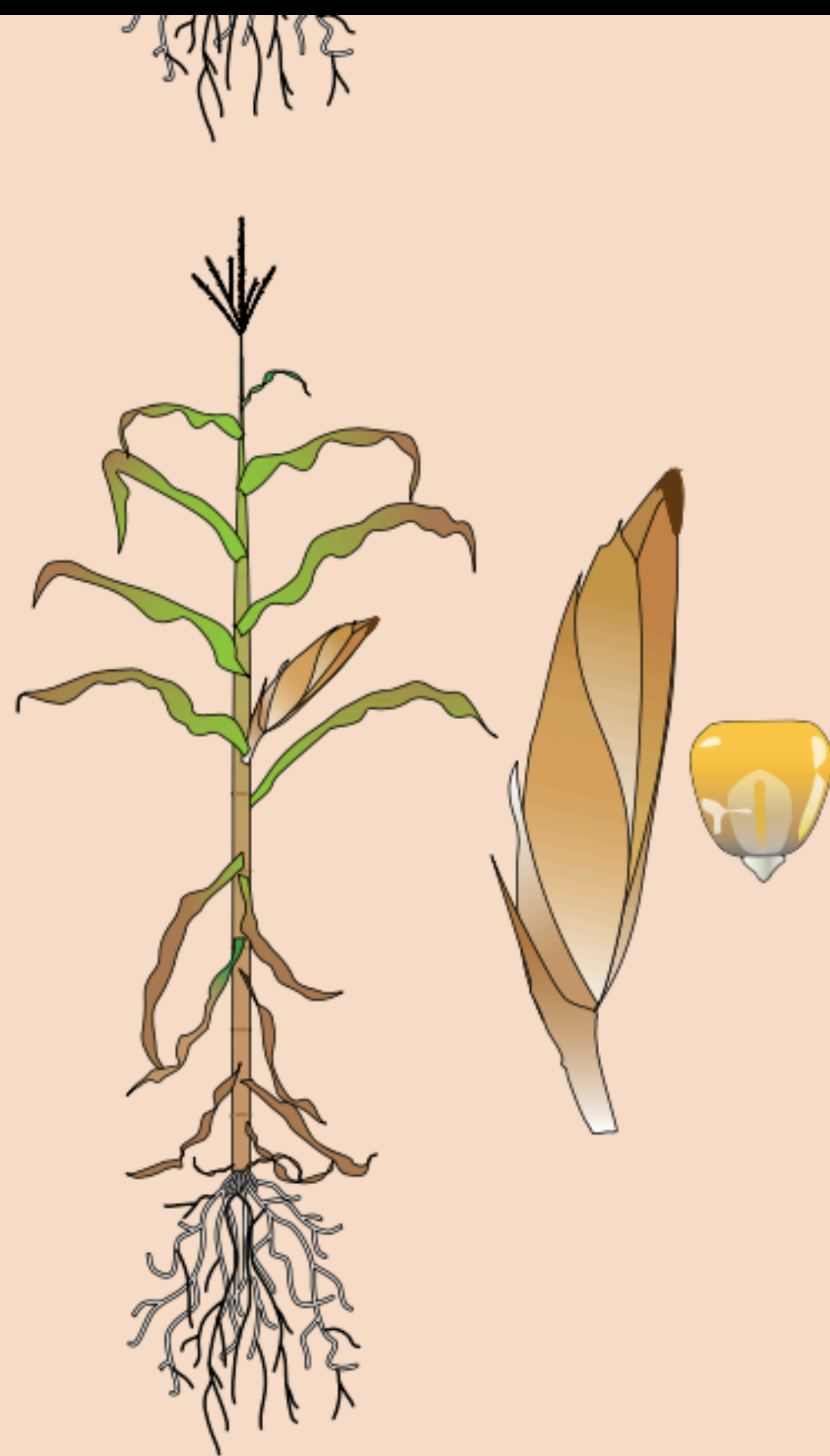
Seed selection

- Popular varieties:
Hickory King, Reids Yellow, Hopi Blue
- Look for open Pollinated Seed if saving seeds

Growing Field Corn

Planting

- Plant early enough to be mature before frost (look at days to maturity)



R6 – Maturity

A black layer forms at the base of the kernel, blocking movement of dry matter and nutrients from the plant to the kernel (50 to 60 days after R1). Kernels achieve maximum dry weight (30 to 35% moisture) and are physiologically mature.

Management

Grain is not ready for safe storage. Frost or any biotic or abiotic stress does not impact yields after this development stage. Lodging from disease, insect damage, or hail can result in physical loss of yield. Harvest can proceed, but recommended moisture for long-term storage is 14.5%. Scout fields for ear drop due to things such as European corn borer damage.

Growing Field Corn

Planting

- Plant early enough to be mature before frost (look at days to maturity)
- Plant 1.5 to 2 inches deep
- 7-10 inches in row
- 30 inches between rows

Growing Field Corn

Pollination

- Corn is wind pollinated (pollen can travel 1/2 mile or more)
- If you or neighbors grow another variety of corn, you'll want to isolate yours to save seeds
 - Isolation can be accomplished by date, distance, or bags



Growing Field Corn

Management

- Most corn needs 1 inch of water per week after 2nd leaf
 - Less frequent, heavy waterings tend to work best
 - Furrow watering works well, as do drip and overhead
- Corn should be cultivated frequently (once per week) until the leaves close the row

Growing Field Corn

Pests

- Corn boring worms, black aphids, several kinds of fungus
- Proper nutrition is the best starting point
 - Corn is a heavy feeder
- IPM strategies—biological controls:
 - Parasitic wasps, *Bacillus thuringiensis* (BT)

Harvesting Field Corn

When to harvest

- Corn should be dented and hard (14% moisture content)
- It can be left in the field if needed
 - Keep an eye on weather, etc.

Harvesting Field Corn

How to harvest

- Harvest Corn by shucking on the stalk and breaking off the ear



Harvesting Field Corn

How to harvest

- Harvest Corn by shucking on the stalk and breaking off the ear
 - Corn stores well on the cob though you can also shell it and bag it up to use less space









What can you do with Field Corn?

Eat it

- Corn can be ground into meal or flour and used in cooking
 - Corn bread, waffles, pancakes, polenta
- Process it into nixtamal/hominy
 - Hominy, pozole, grits, tamales, pupusas, empanadas, tortillas, harepas

What can you do with Field Corn?

Feed it

- Use it for animal feed for chickens and cows

Burn it

- Use it for biomass burning furnace