

# The Life Cycle of the Cotton Plant



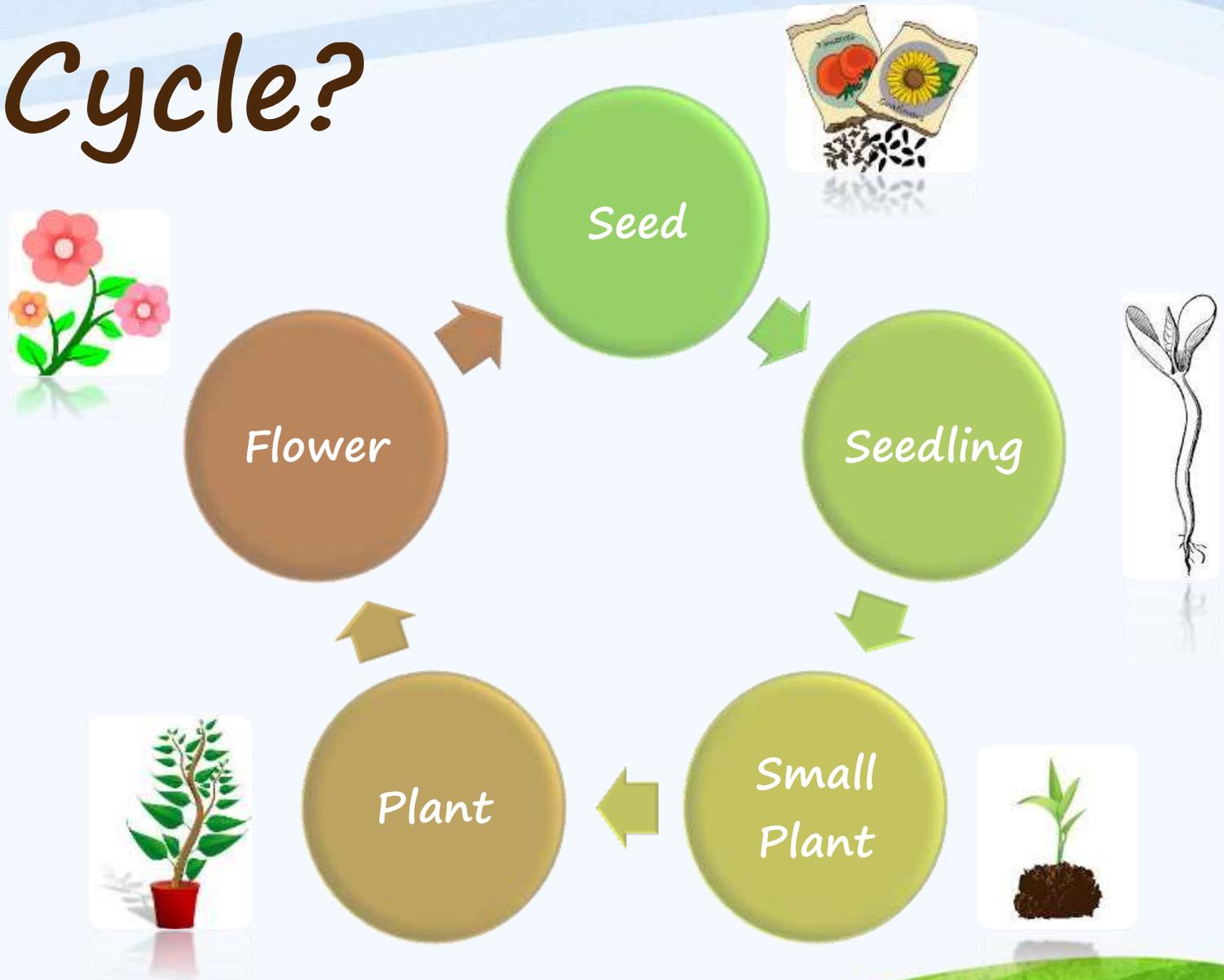
# Essential Questions

- *What is a life cycle?*
- *How does cotton grow?*
- *In what climate does cotton grow best?*

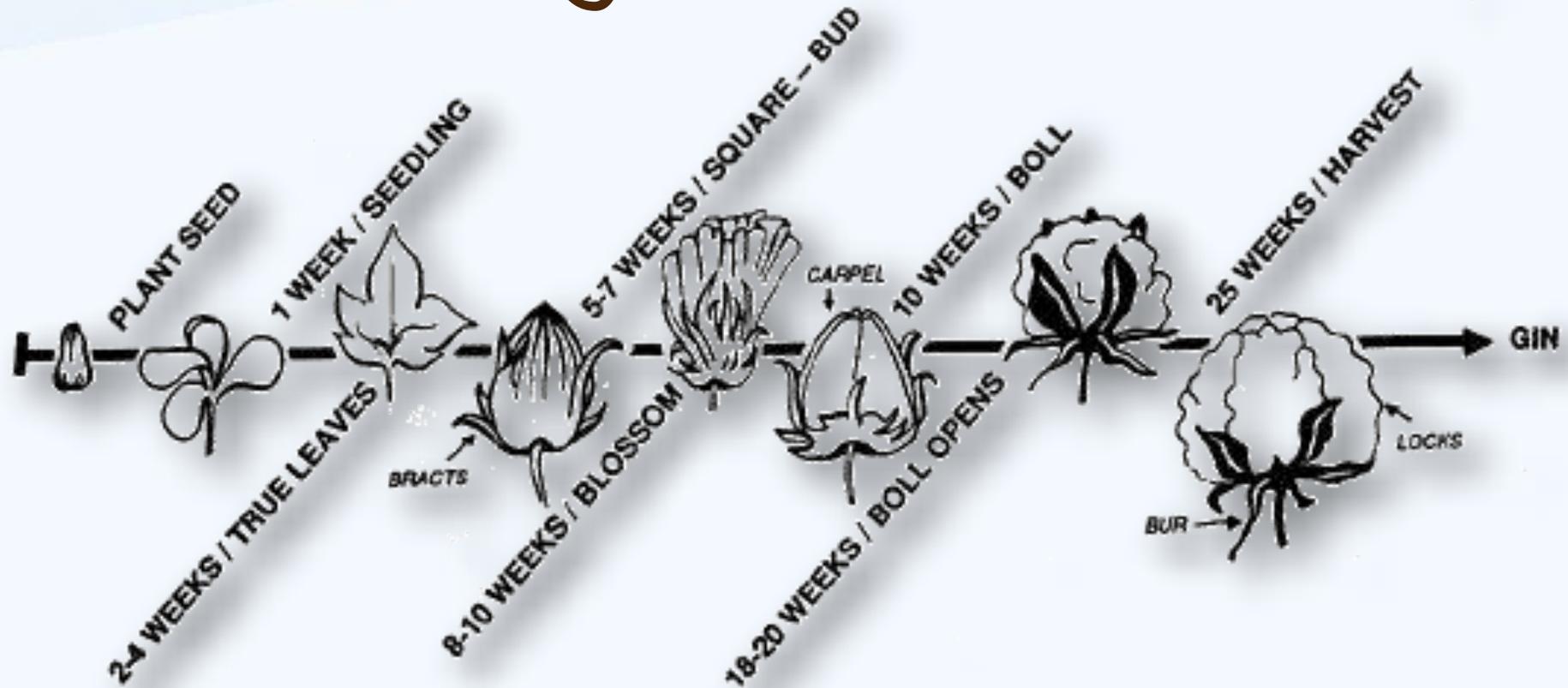


# What is a Life Cycle?

- A life cycle is the series of changes in the life of an organism



# The life cycle of Cotton



*Did you know?*

Cotton is a **slow-growing** plant that requires at least **160 frost-free days** to grow!

# Germination

- After the seed is planted, it takes around **5- 10 days** to germinate and sprout
- The sprout will grow two small leaves called **cotyledons**, which help with **photosynthesis**

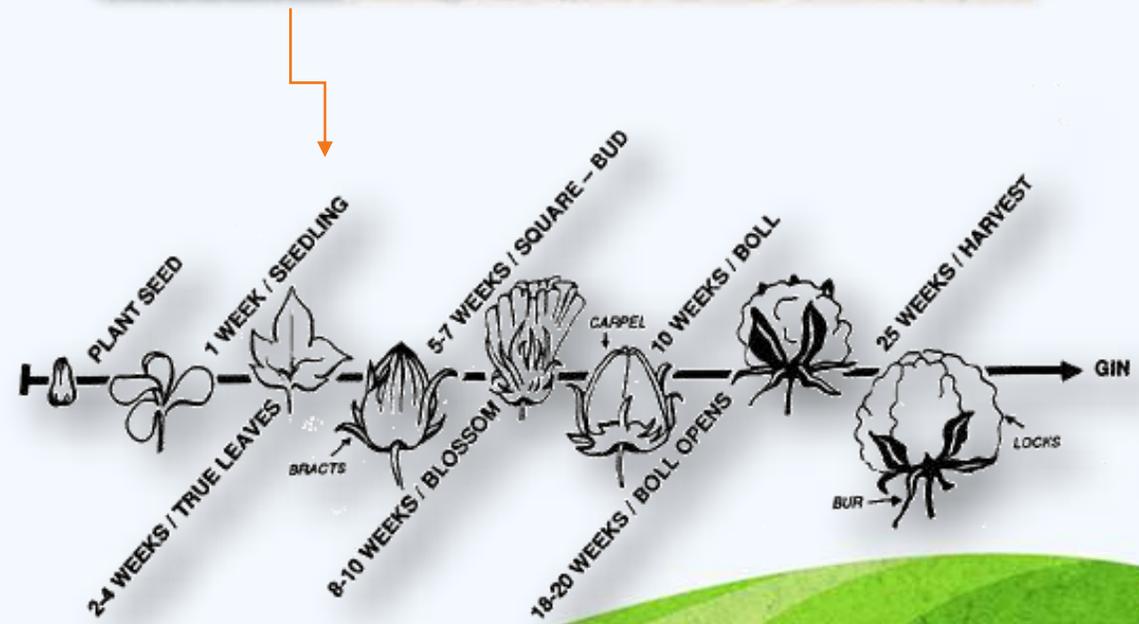
*Photosynthesis is where a plant turns sunlight into energy and food for the plant!*



# Seedling

- The initial leaves (cotyledons) will help the roots to develop
- Once the root system has developed, more leaves begin to appear. This will take 2-4 weeks.

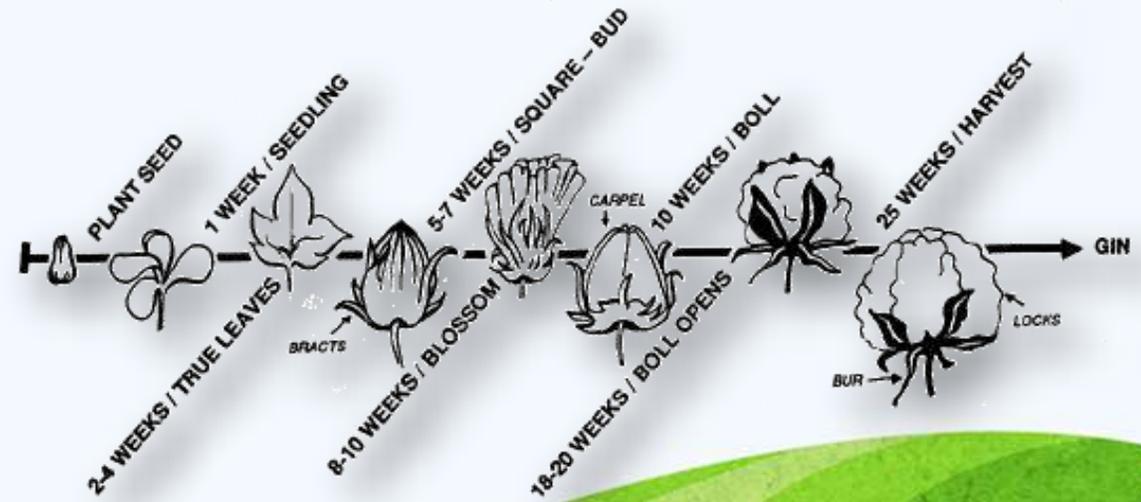
Now the plant will grow to be 2-5 feet tall!



# Square (Bud)

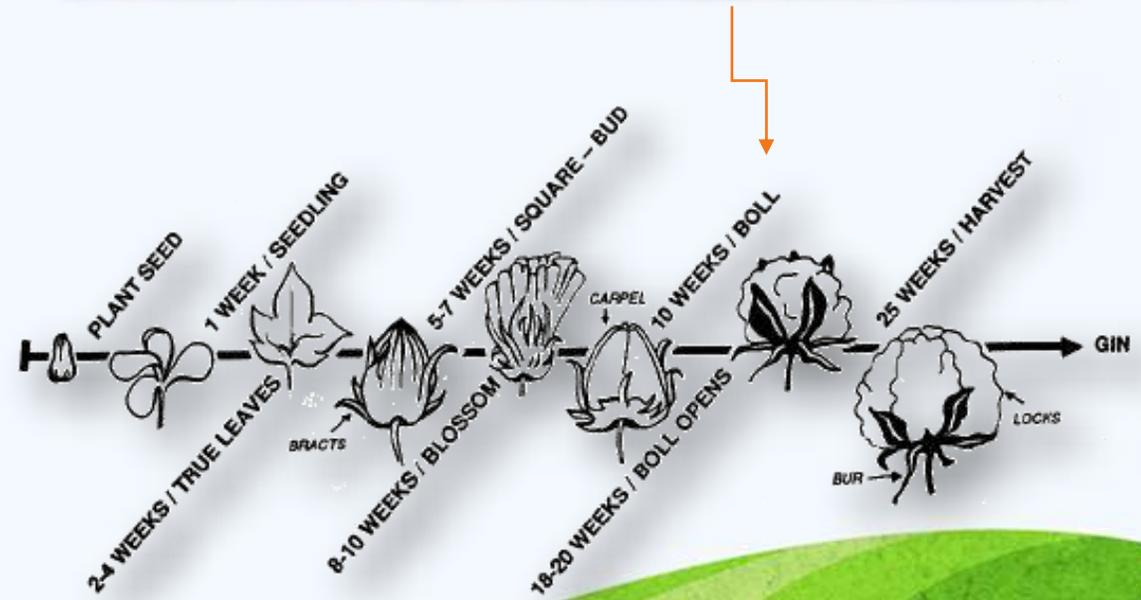
- Flower buds, called **squares** will appear on the plant within **5-7 weeks** after it is planted
- The **white flowers** signal the beginning of the **pollination** process, which begins within 24 hours of the bud's appearance

You need **dry, hot days** for **pollination** to occur!



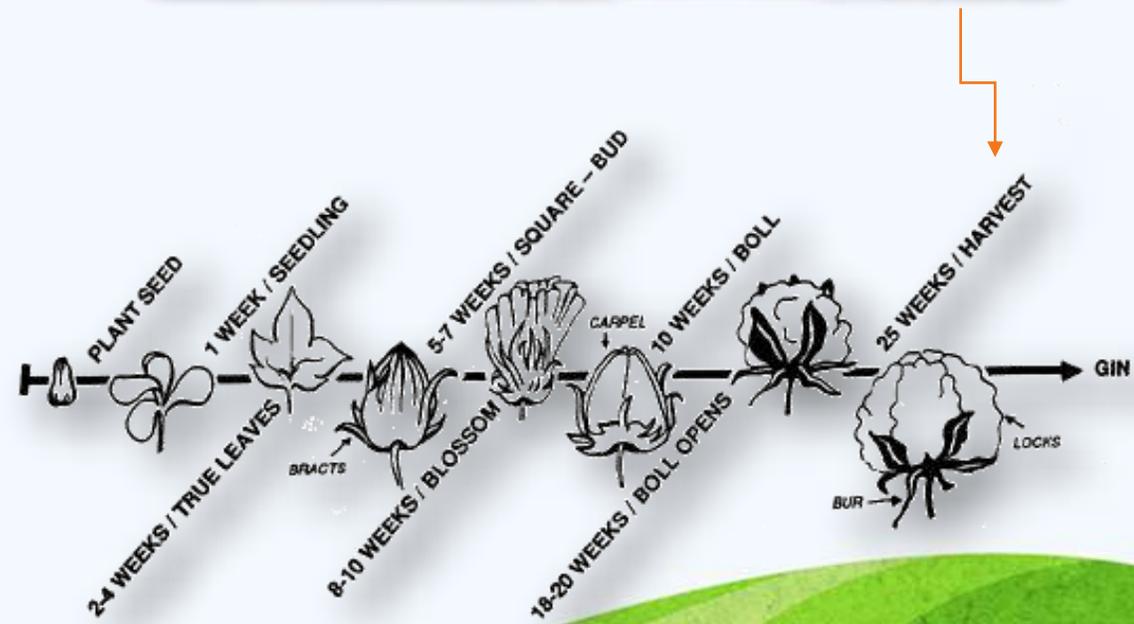
# Boll

- Cotton fibers grow from the seeds inside the boll
- The boll begins to appear after germination
- After the boll stops growing, it will fill with cellulose (plant material)



# Mature Plant

- After the cellulose has filled the boll, the boll bursts open, and cotton spills out
- Now 25 weeks after planting, the cotton is ready for harvest!



# How many species of cotton are there?

Here are 5 major species grown throughout the world:

- Cotton belongs to the genus *Gossypium*
  - There are around 50 species in the *Gossypium* genus, so there are around **50 different species of cotton**

Upland

American  
Pima

Sea Island

Egyptian

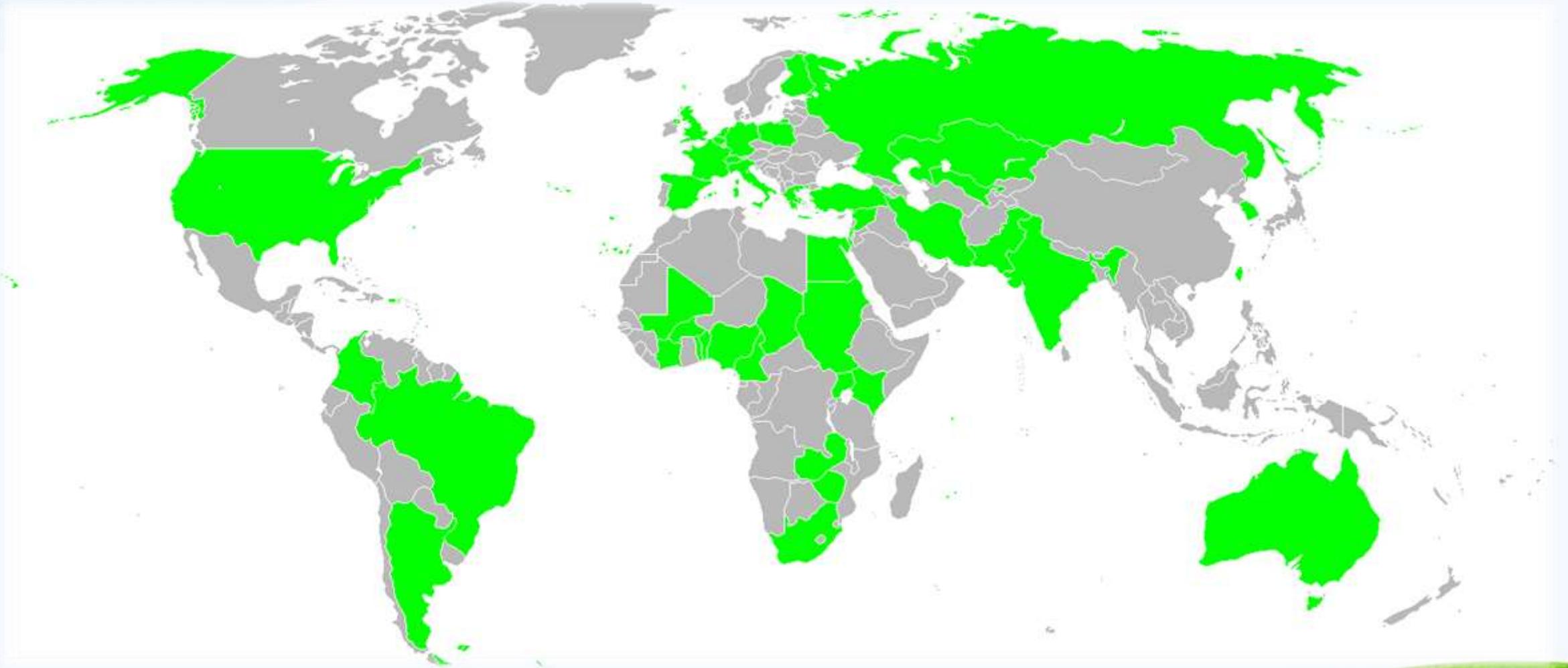
Asiatic

# Where does cotton grow?

- Cotton grows best in warm climates
- Most of the world's cotton comes from:
  - China
  - India
  - United States
  - Uzbekistan
- Other cotton-growing countries include:
  - Brazil
  - Pakistan
  - Turkey



*Look at all the places cotton grows!*



Today, the major cotton-producing states are:

1. Texas

2. Georgia

3. Arkansas

4. Mississippi

5. North Carolina

6. Tennessee

7. Arizona

8. Missouri

9. Alabama

10. California

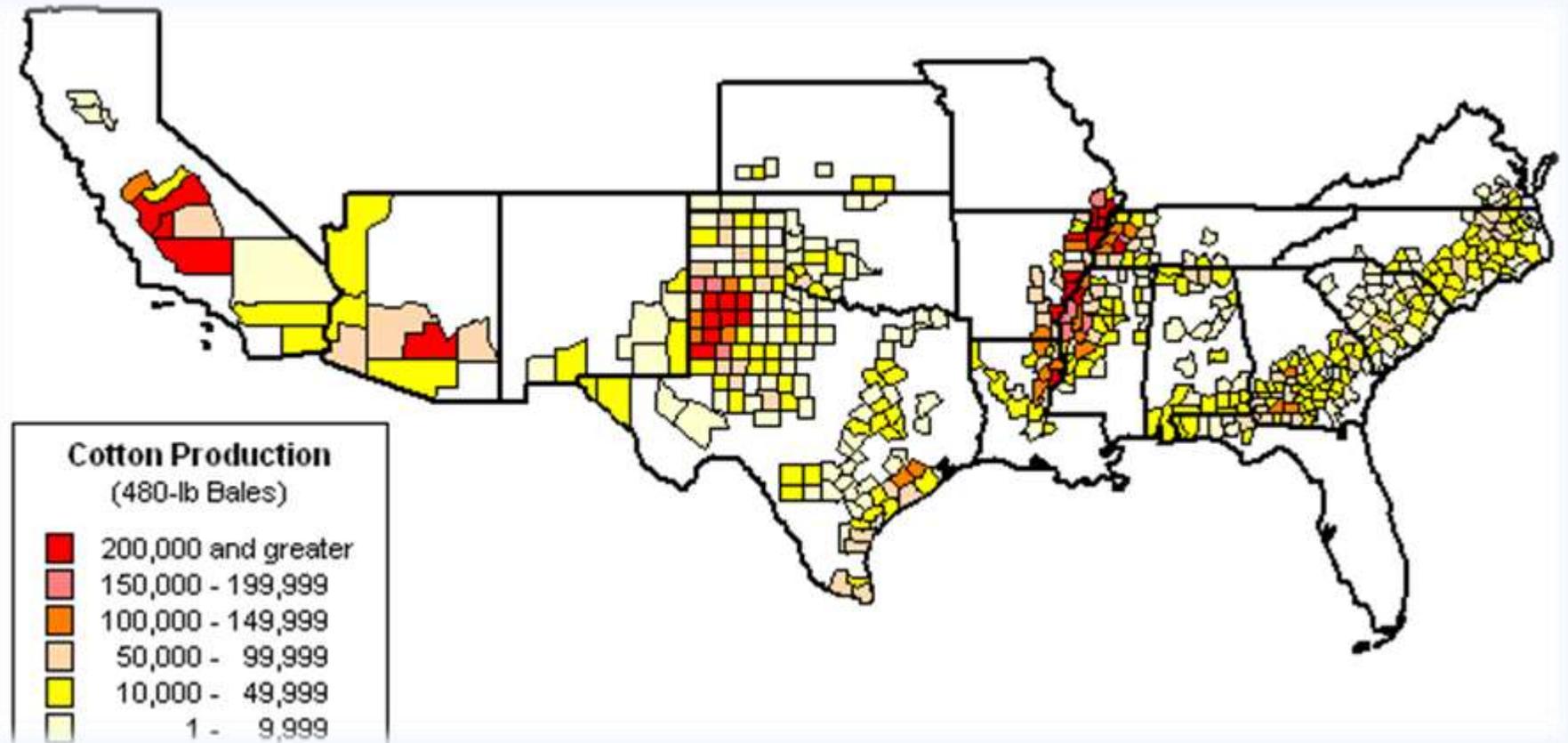
11. South Carolina

12. Louisiana



# United States Cotton Production

*Cotton is grown all across the country!*



*The End!*

