



# HARVESTING STAGE

**When first capsule opens**

**Two to three picking as cotton does not mature at a time**

**In favourable condition cotton plants continue to develop and leaves remain green**

**In areas with a dry season or cold winter vegetative growth slows**

**Leaves wither and fall**

**It facilitates harvesting**



**Manual harvesting:  
25 – 45 man days/ ha**



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# Methods to facilitate harvesting

## Defoliation

**Chemical (Defoliant) applied 15 days before harvesting to kill the leaves and the leaves fall**

**Plant is not affected**

**Capsule continues to mature**

**Ensure 60-70% capsules are matured**

**Cotton pickers are suitable for this method**

## Desiccation

**Chemical applied to cease the growth of the plants accompanied by leaves fall**

**70 – 80% capsules must be matured**

**Suitable for cotton stripper**

# Types of cotton harvester

## COTTON PICKER

Rotating drum  
harvester

Picks the matured  
cotton

Cotton is relatively  
clean

## COTTON STRIPPER

Harvester with **inclined  
rollers or fingers**

Pulls off the capsule

Impure cotton with a lot  
of trash (immature  
bolls, leaves etc)

Requires further  
cleaning



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# COTTON STRIPPER



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# COTTON STRIPPER JOHN DEERE



Horsepower

190

Basket Capacity<sup>5</sup>

808 cu. ft.



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# COTTON STRIPPER

## **Strippers preferred over picker- why?**

**Low first cost**

**Low maintenance**

**Better adopted to stripping with improved variety**

**Improved strippers having flexible rolls to separate green bolls, first stage cleaning**

**Improved ginning equipment for separation of trash**

**Better for closed row spacing**

**Good recovery of cotton**

**Higher operating speed**



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# Principle of stripping

Forcing the cotton plants through an area for the bolls to pass.

The plants remain rooted to the soil

The bolls are snapped

In removing the bolls, a forward & upward force is applied on the bolls

Current models are either brush type or finger type



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# Brush type stripper

**Used on single row**

**A pair of rolls at 30° angle to the horizontal**

**1020 mm long & 150 mm dia.**

**Roll surface has longitudinal brushes alternated with rubber flaps**

**Rolls move upward next to the plants at 600 rpm**

**Bolls snapped off and conveyed over the surface of the rolls**

**Flexibility of the surface adjust to the light and heavy growth of the cotton**

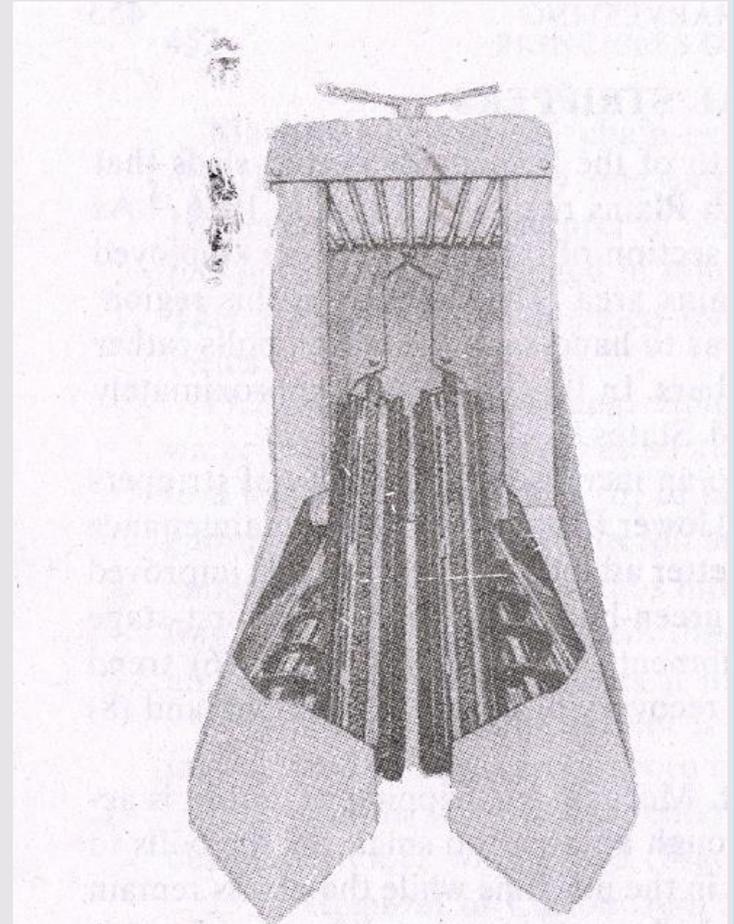


Fig. 19.4. Brush-type cotton stripper. The rolls are fitted with longitudinal brushes alternated with rubber paddles. Cotton bolls are discharged from the rolls into auger conveyor. (Courtesy of Hesston Corp.)



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# FINGER TYPE STRIPPER

Fingers comb upward through the plants as the stripper moves forward

Entire plant to pass through the narrow fingers

Continuous width finger can strip cotton from any row spacing or **random plantings**

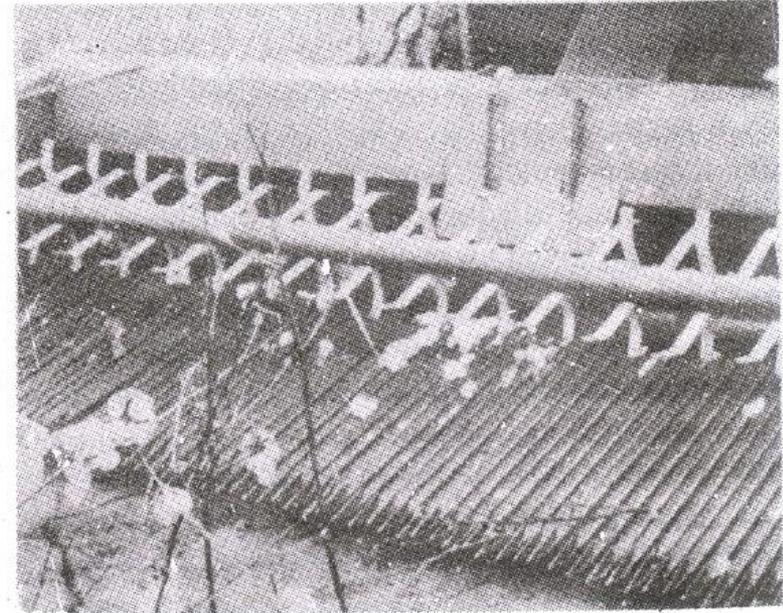
Simpler and less expensive, less maintenance

Not work well in **damp condition** if the plants have not been well defoliated

Also not work well if the plants are large and heavily branched

This condition encountered in irrigated narrow row planting.

(Courtesy of Hesston Corp.)



A continuous-width finger-type stripper. The space between fingers  
The reel above the rear ends of the fingers pushes detached bo