Girdling experiment :

Girdling, also called ring-barking is the complete removal of a strip of bark (consisting of cork cambium or "phellogen", phloem, cambium and sometimes going into the xylem) from around the entire circumference of either a branch or trunk of a woody plant.

Girdling results in the death of the area above the girdle over time. A branch completely girdled will fail and when the main trunk of a tree is girdled, the entire tree will die, if it cannot regrow from above to bridge the wound.

Experiment: frist performed by hartig 1837()

To identify the tissues through which food is transported.

On the trunk tree a ring of bark upto a depth of the phloem layer is removed

The portion of bark above the ring on the stem swell after afew weeks.

This show that the phloem tissue is esponsible for the translocation of food.

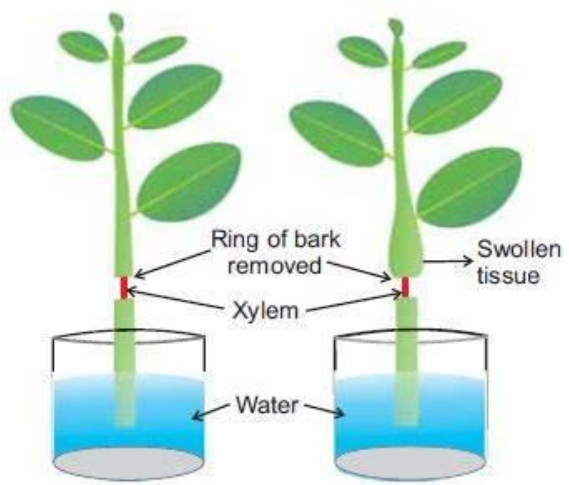

Figure 11.20: Ringing experiment

Human practices of girdling including forestry, horticulture, and vandalism. Foresters use the practice of girdling to thin forests.
Girdling is also used as a technique to force a fruit-bearing plant to bear larger fruit.

references:
https://en.Wikipedia.org