# Butternut juglans cinerea

### Forest Gene Conservation Association

Butternut (Juglans cinerea), is an endangered species, threatened by a fungal disease called butternut canker (Ophiognomonia clavigignenti-juglandacearum), and protected under Ontario's Endangered Species Act (ESA 2007). We are searching for pure, native butternut that may be genetically tolerant to the canker to include in our recovery program. However, in urban and long settled areas, exotic and hybrid walnuts (e.g. Japanese walnut X butternut) have been planted for decades.







## We are Looking for Healthy Butternut

Healthy, native butternut trees could contribute to recovery efforts in Ontario. A suitable recovery tree would have the following characteristics:

- It is growing in natural areas with at least 5 butternut trees greater than 15 cm diameter at breast height (dbh).
- It has a healthy crown (greater than 80% live crown).
- No more than a few sooty stem cankers and should not have any open cankers.
- Growing within 50 meters of cankered butternut trees of any size.

If you think you have a candidate or want to learn more about our recovery efforts please contact us at outreachefgca.net.





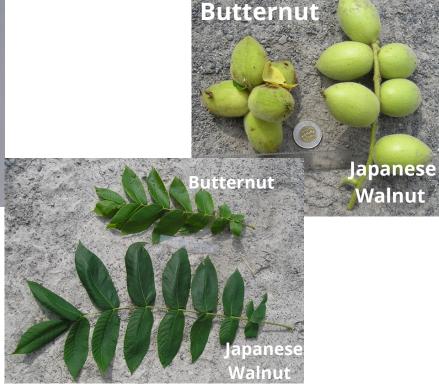
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## Do you have a Pure Butternut

One of the most important elements of our butternut recovery program is ensuring that the individuals used are pure butternut. Even for a trained eye, it can be challenging to differentiate pure versus hybrid individuals.

If you can answer yes to several of these questions your tree may be a hybrid.





- Are catkins longer than 15 cm? They appear before the leaves and drop by mid June.
- Are flowers and seed in groups of 6 or more on long stalks?
- Is the new growth very fuzzy and the mature compound leaves greater than 40 cm long?
- Is the leaf scars upper margin notched?
- Is the tree a good nut producer every year?
- Did the tree start nut production before 15 years of age?
- Is the tree free of canker and in good health?
- Do the leaves drop late in the fall (October) all at once after a hard frost while still green? Native butternut leaves yellow and fall from mid to late August through September.

