*NOTE: This checklist is NOT intended to be used to diagnose thousand cankers disease but to assist in identifying significant samples that should be submitted to an NPDN diagnostic laboratory for diagnosis. Use in conjunction with the NPDN thousand cankers disease photo clue.

Contact your state's NPDN diagnostician with any sample submission questions. To find your state's lab visit <u>www.npdn.org</u>.

Checklist for Thousand Cankers Disease or Walnut Twig Beetle Samples*:

Are there symptoms of thousand cankers disease?

- □ Yellowing of leaves
- □ Foliage thinning in the upper crown
- Limb death
- □ Wilted limbs in advanced stages of disease

Is it a walnut tree?

- □ Alternate arrangement of buds and leaves
- □ Leaves ranging in size from 12–24 inches long
- □ Pinnately compound with up to 23 leaflets, finely toothed and about 2–4 inches long
- □ Furrowed bark
- □ Distinctive buds and leaf scars on twigs
- □ Fruit present is a round, smooth husk surrounding nut
- What species of walnut is it? ______

Do you see signs of walnut twig beetles?

- Adult walnut twig beetles are very small, like a small flea, and yellowish-brown
- □ Larvae are very small and will likely not be visible
- □ Beetle damage may include small exit holes and very shallow tunneling, visible if you scrape off outermost layer of bark

Do you see cankers?

- □ Coalescing externally visible cankers may only be visible late in infection
- □ Earlier, dark brown to black cankers may be present just under the bark if outermost layers shaved away



