

# THE PURDUE LANDSCAPE REPORT

## Boxwood Browning, Blights, and Cankers - 2023 Update

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In the last five years, we have received 233 samples from Indiana, alone, with concerns ranging from boxwood leafminer to *Volutella* dieback and cold damage (Figure 1, 2, 3). Often, we find multiple problems on any given sample, and very frequently we see *Volutella* in association with dark cankers of stems that appear to have had some amount of cold injury earlier in the season.

Year	Number of Boxwood Samples (In Indiana)
2019	72
2020	32
2021	39
2022	25
2023	65 – as of July 25 <sup>th</sup> Expected to surpass 2019



Figure 2: Tip damage due to cold temperatures



Figure 1: Cold injury leading to individual and sections of branches of boxwoods dying back. Secondary infection by *Volutella* was confirmed by lab testing.



Figure 3: Bark Splitting and sloughing due to cold injury on the

stem

In 2023, we are on our way to seeing a record number of boxwood samples in the months of June and July compared to recent years, with the primary diagnosis being *Volutella* canker (Figure 4) and cold damage (see <https://www.purduelandscape.org/article/cold-injury-during-a-very-mild-winter/>). Joe Boggs has a great write-up of his observations, which mirror our own, for the state of boxwoods this year in the Ohio State University Buckeye Yard and Garden Line (<https://bygl.osu.edu/index.php/node/2198>).



Figure 4: Individual boxwood branch showing symptoms of *Volutella* blight



Figure 5: Bare stems and stem dieback due to boxwood blight.

Some leaf spots are present on the foliage, but there are a large number of stem lesions also visible on the plant.

We are also seeing an uptick in *Colletotrichum* Dieback samples, where symptoms of stem dieback look very similar to *Volutella* and winter injury. An important point to note is that with all of the issues mentioned above, the foliage is retained on the leaves for extended periods of time (but they do eventually fall off). Leaf spotting and leaf drop symptoms are more suggestive of boxwood blight (Figure 5). Many of the samples we have received were due to concerns about boxwood blight, caused by *Calonectria pseudonaviculata*, but there have only been two landscape cases of boxwood blight in the state.

This is encouraging, but we always recommend to evaluate any boxwood plants that you are intending to purchase for leaf spots, external stem lesions, and leaf drop. Along with our favorite mantras in the green industry, “Right Plant, Right Place,” comes “Start Clean, Stay Clean,” avoid purchasing any sickly plants, especially anything on the bargain or reduced-price shelves, since you do not want to bring anything unwanted home.

If you are concerned about leaf drop and suspect you may have boxwood blight, or have stem dieback issues in boxwood, and want help determining the cause of the problem, we recommend submitting a sample to the diagnostic lab. Please see our website below, or reach out via email:

[PPDL-samples@purdue.edu](mailto:PPDL-samples@purdue.edu)

<https://ag.purdue.edu/department/btny/ppdl/>

#### Selected References

##### Colletotrichum dieback

<https://www.ncipmc.org/communications/pest-alerts/boxwood-dieback/>

<https://www.purduelandscape.org/article/other-boxwood-issues/>

##### Boxwood Blight

<https://www.purduelandscape.org/article/boxwood-blight-be-on-the-look-out/>

<https://purdueplantdoctor.com/factsheet/tree-404>

##### Volutella Canker/Blight

<https://purdueplantdoctor.com/factsheet/tree-91>

<https://www.purduelandscape.org/article/volutella-blight-and-dieback-of-boxwood/>

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