SASSAFRAS

Products: Spice and condiment
Plant Parts Used: Leaves and bark of shoots and roots

FOOD

Sassafras (*Sassafras albidum* [Nutt.] Nees) grows best in open woods on moist, well-drained, sandy loam soils and can be a pioneer species in old fields, along fences, and on dry ridges. It can be found in more than 28 States from Maine to Texas (shown in green on the map below) and has its largest forms in the Great Smoky Mountains. It is found commonly with sweetgum (*Liquidambar styraciflua*), flowering dogwood (*Cornus florida*), hickories (*Carya* spp.), oaks (*Quercus* spp.), and yellow poplar (*Liriodendron tulipifera*).

Nontimber Uses

- Native Americans used sassafras as a tonic and herb to treat ailments and for food, furniture, and a variety of other purposes.

- Sassafras was one of the first cash crops exported from the Virginia Colony to Europe for its curative properties and as a beverage ingredient.

- Oil extracted from sassafras roots was once used to flavor root beer and baked goods.

- Sassafras leaves and roots are used for thickening soups, and its essential oils are used to scent soaps.

- Filé, a favored spice in Cajun cuisine, is made from dried and ground sassafras leaves.
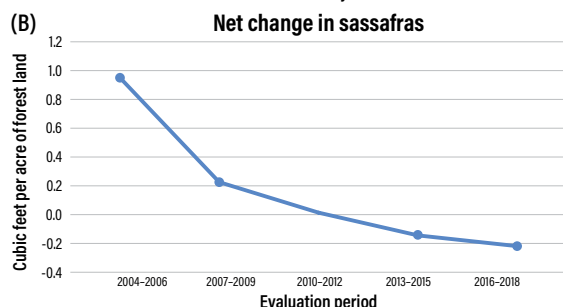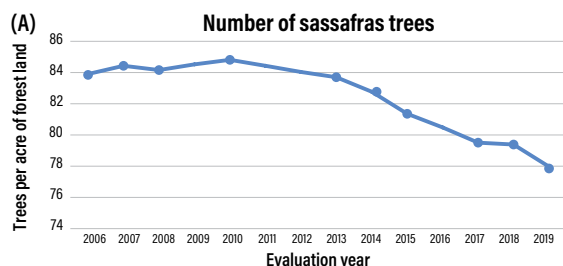
Markets

- There is little documentation of the markets for sassafras, but it has been of commercial value for a long time.

- The primary markets for sassafras are specialty health and culinary enterprises.

- Buyers of bulk, raw sassafras material for the spice trade are scattered across the country.

  ▲ Firms can be found in Indiana, Michigan, California, and Colorado, and are not bound to be the source of the product.

  ▲ Most of these firms are not readily identified or recognized as part of the forest products industry.

Key Points

- Sassafras is an under-utilized and under-recognized tree species with economic value in specialty health and culinary sectors of the forest products industry.

- Since 2006, there has been an 8-percent decrease in the estimated average number of sassafras trees per acre of forest land across the species' range.

- Most States within the range of sassafras exhibited a negative net change in volume since 2004.

(A) Number of sassafras trees

X-axis: Evaluation year (2006–2019)
Y-axis: Trees per acre of forest land (74–86)

(B) Net change in sassafras

X-axis: Evaluation period (2004–2006, 2007–2009, 2010–2012, 2013–2015, 2016–2018)
Y-axis: Cubic feet per acre of forest land (-0.4 to 1.2)

Status[a]

- Sassafras appears in Forest Inventory and Analysis (FIA) plots across 28 States, with the most trees per acre of forest land found in Missouri, Alabama, and Oklahoma.

- The estimated number of sassafras trees per acre of forest land declined from about 84[b] (2006) to 78[c] (2019) (see chart [A]).

- Estimated volume in the States' latest evaluation year was approximately 73.36[d] cubic feet per acre. Michigan, Indiana, and Ohio had the greatest volume of sassafras per acre of forest land.

- Michigan exhibited the greatest growth in its latest evaluation year, followed by Tennessee and Kentucky.

- Over all States, the greatest positive net change (i.e., difference between growth and sum of mortality and removals) was observed in Michigan, New Jersey, and Rhode Island.

- Over 35 percent of the States exhibited negative net change in their latest evaluation year, substantiating a decline illustrated by the average estimates for five 3-year periods (see chart [B]).

[a] Estimates are based on observations of at least one specimen of the species in an inventory plot (representing about 6,000 acres of forest land). They are not based on all forest land for the State.
[b] At 68-percent confidence level, standard error is ± 2.06 percent of estimate.
[c] At 68-percent confidence level, standard error is ± 2.43 percent of estimate.
[d] At 68-percent confidence level, standard error is ± 3.73 percent of estimate.

Management and Implications

- Sassafras is susceptible to the laurel wilt disease, which results from a fungus (*Raffaelea lauricola*) carried by the invasive redbay ambrosia beetle (*Xyleborus glabratus*). As of 2019, laurel wilt had been found from Texas to North Carolina, and from Florida into Kentucky.

- Estimated mortality and removals have exceeded estimated growth over most of the years examined, indicating a decline in overall population and health of the species.

- FIA scientists estimate that about 40 percent of the sassafras trees measured in the 2009 FIA survey in Georgia had died by 2014.

- Sassafras is an under-recognized and under-utilized resource that has significant ecological and economic values.

References

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The U.S. Department of Agriculture Forest Service **Forest Inventory and Analysis (FIA)** program tracks growth, mortality, and removals of forest trees and more. For additional information: https://www.fia.fs.fed.us/

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