

Sidney Brown, OMS III, Dillon Fountain, OMS III, and Stuart Leonard, PhD

William Carey University
College of Osteopathic
Medicine

Ethnobotany of the Southeastern United States

Traditional Uses by Native American Tribes



Callicarpa americana L.

Native American Tribe: Choctaw

Use Category: Drug

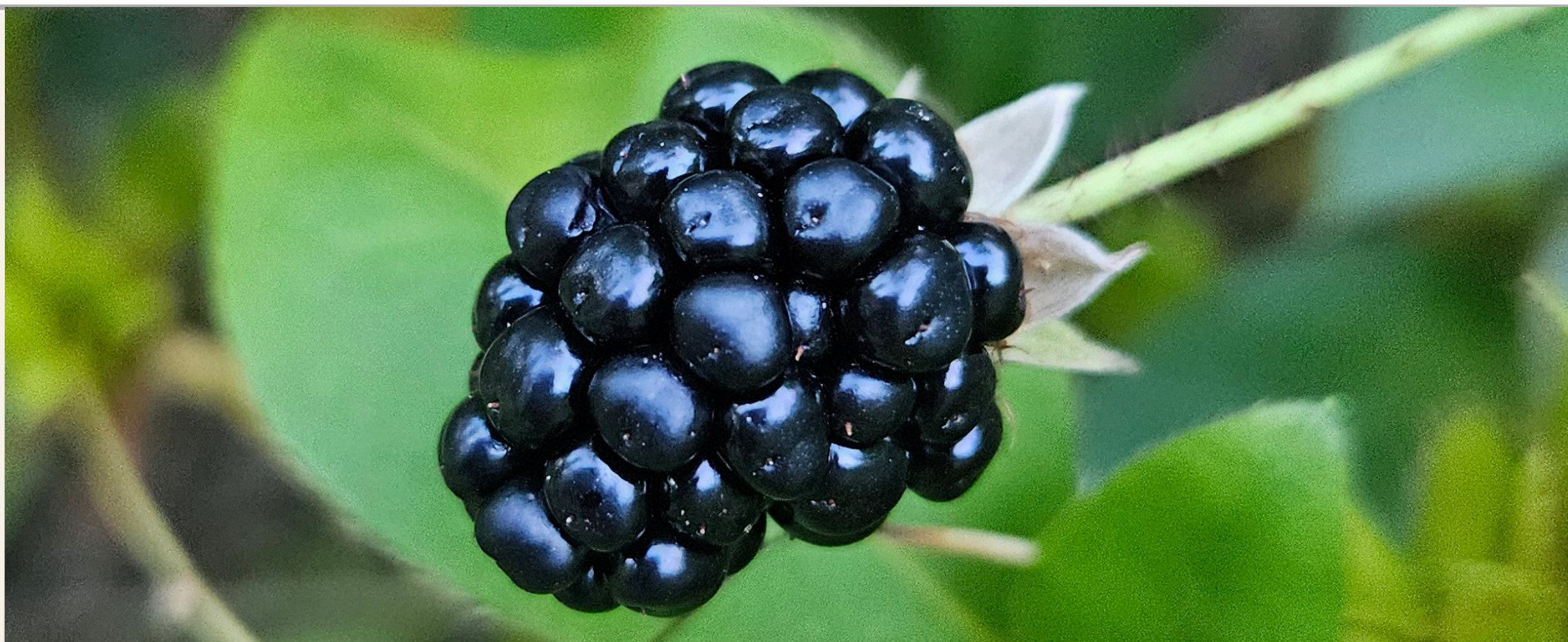
Use Sub-Category:

Gastrointestinal Aid.

Antidiarrheal.

Notes: Decoction of roots and berries taken for colic. Decoction of roots taken for dysentery.¹

Contains callicarpenal—studied for insect-repellent properties and anti-inflammatory effects.^{2,3}



Rubus allegheniensis Porter

Native American Tribe: Cherokee

Use category: Drug

Use sub-category: Antidiarrheal. Hemorrhoid Remedy. Urinary Aid. Antirheumatic.

Notes: Infusion of root or leaf used for diarrhea.⁴

High in tannins—may explain astringent and antidiarrheal properties.⁵

Hibiscus moscheutos ssp. *moscheutos*

Native American Tribe:

Shinnecock

Use category: Drug

Use sub-category: Urinary Aid

Notes: Infusion of dried stalks applied for inflammation of the bladder.⁶

Downregulate cytokines- Other Hibiscus species reduce inflammation in mice and lower UTI rates in long-term care patients.⁷



Background

Inspired by the University of Southern Mississippi’s Medicine Wheel Garden—a four-direction garden highlighting traditional plant use by Southeastern Native American tribes—this project explores the ethnobotanical significance of native plants in the Pine Belt region of Mississippi. Many of these species have historically been used by Indigenous communities for medicinal, nutritional, and ceremonial purposes. Increasing awareness of these native plants and their traditional applications can foster appreciation for local biodiversity and cultural heritage.

Methods

Native plant species from the Pine Belt region were photographed, with particular focus on those also cultivated in the University of Southern Mississippi Medicine Wheel Garden. Each specimen was identified and cross-referenced using the Native American Ethnobotany Database. Documented uses by Southeastern tribes were prioritized when available. Data collection included medicinal, dietary, and other traditional applications. Reported uses were then compared to peer-reviewed literature indexed in PubMed to explore potential mechanisms underlying the observed therapeutic benefits.

Conclusions

Although native Southeastern plants are widely accessible, they are understudied in clinical and biomedical contexts. Exploring these herbs through both traditional ethnobotanical knowledge and modern clinical frameworks may uncover therapeutic compounds with practical healthcare applications. Expanding research in this area not only fosters culturally competent care but also bridges the gap between ancestral herbal practices and integrative medicine.

Ilex vomitoria Ait.

Native American Tribe: Natchez

Use category: Drug

Use sub-category: Emetic

Notes: Plant used as an emetic.⁸

Contains caffeine and theobromine—which can cause vomiting in large quantities.^{9,11} **Flavanol-rich** fractions exhibit anti-inflammatory effects.¹⁰



Tillandsia usneoides L.

Native American Tribe: Houma

Use category: Drug

Use sub-category: Febrifuge

Notes: Decoction of moss taken for chills and fever.¹²

Native American Tribe: Not Listed

Use category: Drug

Use sub-category: Antirheumatic. Diabetic Drug. Antihemorrhoid.

Cycloartane-type triterpenes and methoxylated flavonoids- pro-oxidant effects in-vitro on cancer cell lines.¹³



Works Cited

Please scan the QR code to access our references. Thank you.

