

353. *UMBELLULARIA CALIFORNICA* (Hook. and Arn.) Nutt. — California Bay, California Laurel, California Sassafras

Aromatic evergreen tree, sometimes grown as ornamental.³⁶ Indians and early Spanish settlers employed the leaves as a condiment, and as ingredients in counterirritants and insecticides. Crushed leaves were packed around game immediately after the kill, to (1) keep away flies and (2) improve the flavor.⁷ Wood valued for fine carpentry. According to Hardin and Arena, the berries are eaten raw or roasted.

California Bay is reported to be a folk remedy for colic, diarrhea, headache, rheumatism, and stomachache.^{3,32}

Bark and leaves contain a pungent volatile oil, the stem yielding 0.56 to 1.13%, leaves up to 4.69%, the chief constituent being umbellulone (40 to 60%), a ketone $C_{10}H_{14}O$; eugenol, 1-alpha-pinene, cineole, safrole, methyl eugenol, formic acid. Buttery et al.³²⁸ found the volatile oil of the leaves to contain 39% umbellulone, 19% 1-8-cineole, 7.6% alpha-terpineol, 6.2% terpinen-4-ol, 6% sabinene, 4.7% alpha-pinene, and 5.4% 3,4-dimethoxyallylbenzene. Twenty-six other compounds were characterized. Lawrence¹⁹³ compares the chemical menus from California Bay, Grecian Bay, and Jamaica Bay, devoting two pages of tables to *Umbellularia*.

Toxicity — Produces irritation of the mucous membrane of some persons who handle it.⁶ Inhalation of the oil causes severe headache⁷ and raises the blood pressure. According to MacGregor et al.,³²⁹ the acute oral toxicity to mice of the oil was greater than that of *Laurus* and *Pimenta*, due primarily but not entirely to umbellulone. DMAB (3,4-dimethoxyallylbenzene) produced sedation at low doses and a reversible narcosis at higher doses. DMAB prevented the death of mice treated with lethal convulsant doses of strychnine. Once I read a report of a fatality attributed to the California Bay, but I can no longer find the reference.