

200. *LAURUS NOBILIS* L. (LAURACEAE) — Bay, Grecian Laurel, Green Bay

In biblical times, the bay was symbolic of wealth and wickedness.³⁸ In the ancient Olympic games the victorious contestant was awarded a chaplet of bay leaves, placed on his brow. The Roman gold coin of 342 B.C. has a laurel wreath modeled on its surface. The evergreen leaves, when broken, emit a sweet scent and furnish an extract used by the Orientals in making perfumed oil. Dried bay leaves are used to flavor meats, fish, poultry, vegetables, soups, and stews; also, as an ingredient in pickling spices and vinegars. They are particularly popular in French dishes. Leaves have served as a tea substitute. An essential oil, distilled from the leaves, is used in perfumery and for flavoring food products, such as baked goods, confectionary, meats, sausages, and canned soups. The oil can be measured more precisely and provides more uniform results. The fat from the fruits has served in soapmaking and veterinary medicine. The wood, resembling walnut, can be used for cabinetry.³⁸

Regarded as aperitif, carminative, diuretic, emetic, emmenagogue, narcotic, nervine, stimulant, stomachic, and sudorific, bay has found its way into folk remedies for amenorrhea, colic, condylomata, hysteria, impostumes, polyps, scleroses, spasms, and wens.^{32,38} Methyl eugenol, which constitutes 4% of bay oil, is narcotic and sedative in mice, producing sedation at low doses and reversible narcosis at higher doses. The essential oil has bactericidal and fungicidal properties. An ointment of unguent derived from the plant is said to remedy sclerosis of the spleen and liver and tumors of the uterus, spleen, parotid, testicles, liver, and stomach. The fruit, prepared in various manners, is said to help uterine fibroids, tuberosities of the face, scirrhous and scleroma of the uterus, scirrhous of the liver, indurations of the joints, spleen, and liver, internal tumors, wens, and tumors of the eye. Leaves and fruits, said to possess aromatic, stimulant, and narcotic properties, were once employed for amenorrhea, flatulent colic, cough, and hysteria. In small doses, leaves are diaphoretic; in large doses, emetic. Bay oil sometimes used as a liniment or anodyne for earache. In Lebanon the leaves and berries are extracted to a carminative liver and stomach tonic, tightly corked, and steeped in brandy in the sun for several days. The residue, after subsequent distillation, is used as a liniment for rheumatism and sprains, the distillate as an emmenagogue. Lebanese mountaineers are said to use raw berries to induce abortion. Berries macerated in flour were poulticed onto dislocations.³⁸ Pech and Bruneton¹⁸⁹ reported on the alkaloidal constituents, the leaves containing mostly reticuline, with some boldine, *N*-methylactinodaphnine, (+)-isodomeesticine, (+) neolitsine, actinodaphnine, nor-isodomeesticine, launobine, nandigerine, and cryptodorine; actinodaphnine constituted about half of the stem alkaloids, with some reticuline and launobine; the inflorescence contained mostly actinodaphnine, with some reticuline, launobine, and nandigerine. 3,4-Dimethoxyallylbenzene produces sedation in mice at low doses; a reversible narcosis at higher doses. It prevented the death of mice treated with lethal convulsant doses of strychnine. It may have relatively specific control nervous or myoneural effects, perhaps, suggesting a clinical potential.

Per 100 g, the leaves are reported to contain 188 calories, 45.2 g H₂O, 4.2 g protein, 1.2 g fat, 47.1 g total carbohydrate, 4.6 g fiber, 2.3 g ash, 187 mg Ca, 70 mg P, 5.3 mg Fe, 1050 µg β-carotene equivalent, 0.04 mg thiamine, 0.21 mg riboflavin, 1.7 mg niacin, and 54 mg ascorbic acid. Laurel leaf oil (yield *circa* 0.5%) has been reported to contain 12% terpenes, 45% cineole, 18% free alcohols, 13% esters (mainly acetates), 0.53% eugenol, 1.1% eugenol acetate, 3% methyl eugenol, and 3 to 4% sesquiterpenes.⁷ Pinene, phellandrene, cineole, linalool, terpineol, geraniol are also reported.⁷ El-Ferally and Benigni,¹⁹⁰ studying the sesquiterpene lactones of the leaves, identified the major one as costunolide, with artemorin, regnosin, santamarine, and verlotorin present in smaller quantities. The berry (30% pericarp, 70% seed) yields 20 to 34% of an aromatic fat, the fatty acids of which are 30 to 35% lauric, 10 to 11% palmitic, 33 to 40% oleic, and 18 to 32% linoleic.¹

Toxicity — Bay leaves used as a culinary herb have caused stomatitis and cheilitis. Laurel