91. *CINNAMOMUM VERUM* J. S. Presl (LAURACEAE) — Ceylon Cinnamon

The bark as the condiment, cinnamon, is used in food, dentrifices, incenses, and perfumes. Cinnamon bark oil, distilled from chips and bark of inferior quality, used in foods, perfumes, soaps, cordials, and in drug and dental preparations. Cinnamon leaf oil, distilled from dried green leaves, is a powerful germicide, and is also used in perfumes, spices, and in the synthesis of vanillin.[61] The essential oils are antiseptic, and ether-soluble fraction antioxidant.

Ceylon cinnamon considered aromatic, astringent, carminative, and stimulant. A fragrant cordial, useful for weakness of stomach and diarrhea, checking nausea and vomiting, and used in other medicinal mixtures.[61] Is a folk remedy for amenorrhea, arthritis, asthma, bronchitis, cancer, cholera, coronary problems, cough, diarrhea, dysentery, dyspepsia, fever, fistula, lumbago, lungs, menorrhagia, nephritis, phthisis, prolapse, proctosis, psoriasis, spasms, tumors, vaginitis, warts, and wens.[3,32,33] Cinnamaldehyde is antipyretic, hypothermic, and sedative. Cinnamon oil is antifungal, antiviral, bactericidal, and larvicidal. Eugenol is antiseptic. At a 0.1% concentration, a liquid CO_2 extraction of cinnamon bark completely suppressed growth of candida, escherichia, and staphylococcus.[29]

Cinnamon bark contains up to 4% volatile oil (*circa* 1%); tannins, consisting of polymeric 5,7,3′,4′-tetrahydroxyflavan-3,4-diol units; resins; mucilage; gum; sugars; calcium oxalate; two insecticidal compounds (cinnzelanin and cinnzelanol); and coumarin.[29,33] The bark oil contains *circa* 60 to 75% cinnamaldehyde; also, eugenol, eugenol acetate, cinnamyl acetate, cinnamyl alcohol, methyl eugenol, benzaldehyde, cuminaldehyde, benzyl benzoate, linalool, caryophyllene, safrole, etc.[29,33] Of monoterpenes the root bark oil contains camphene, delta-3-carene, limonene, alpha-phellandrine, alpha and beta-pinene, sabiene, alpha-terpinene; of oxygenated monoterpenes borneol, camphor, 1:8-cineole, geraniol, linalol, piperitone, alpha-terpineol, and terpinen-1-ol; of aromatic monoterpenes, para-cymene, cinnamaldehyde, cinnamyl acetate, ethyl cinnamate, eugenol, eugenol acetate, safrole, benzyl benzoate, beta-caryophyllene, alpha gumulene, and gamma-ylangene.[64] The leaf oil contains eugenol, cinnamaldehyde, cinnamyl alcohol, cinnamyl acetate, ethyl cinnamate, eugenol acetate, benzaldehyde, etc., monoterpene hydrocarbons (e.g., camphene, carene, pinene, phellandrene, cymene, etc.), terpinene, humulene, isocaryophyllene, alphalylangene, coinferaldehyde, methyl cinnamate, and ethyl cinnamate.[29] Of the various types of cinnamon bark oils, that of *C. zeylanicum* has the largest amount of eugenol. Eugenol is reportedly absent in cassia bark oil.[29,64] Per 100 g, commercial ground cinnamon (mixture of cassia and cinnamon) contains 261 calories (1094 kJ), 9.5 g H_2O, 3.9 g protein, 3.2 g fat, 79.8 g total carbohydrate, 24.4 g fiber, 3.6 g ash, 1.228 mg Ca, 61 mg P, 38 mg Fe, 56 mg Mg, 26 mg Na, 500 mg K, 2 mg Zn, 260 IU vitamin A, 0.02 mg thiamine, 0.14 mg riboflavin, 1.3 mg niacin, and 28 mg ascorbic acid. There are 26 mg phytosterols.

Toxicity — Cinnamic aldehyde in perfumes can cause dermatitis, in toothpaste can cause sensitivity. Following ingestion of cinnamon, contact dermatitis may flare up as "pompholyx".[6] Eugenol has been reported to be irritant and a weak tumor promoter.[29]