

pharyngitis, phthisis, physometra, pneumonia, poisoning, polyps, pregnancy, pyrosis, quinsy, rheumatism, rhinosis, scarlatina, shoulder, smell, stomach, syphilis, tinnitus, tumor, typhoid, nausea, whitlow, and whooping cough.^{4,30,32,33} Roots applied to dental caries to relieve toothache.¹¹ Regarded as alterative, aphrodisiac, diaphoretic, diuretic, emetic, emmenagogue, expectorant, febrifuge, laxative, narcotic, prophylactic, rubefacient, sedative, ster-nutatory, stimulant, and vermifuge.^{4,27,32,33}

Contains the alkaloids alpha-allocryptopine, beta-allocryptopine, berberine, chelerythrine, chelilutine, chelirubine, coptisine, homochelidonine, oxysanguinarine, protopine, pseudo-chelerythrine, sanguidimerine, sanguilutine, sanguinarine (*circa* 1%), and sanguirubine. Rhizome also contains a reddish resin and much starch. The seed contains 0.1 and 28% fatty oil. Leaves contain 0.08% alkaloid,³³ the rhizome 4.7%, the roots 1.8%. Citric and malic acids, gum, and porphyroxin are reported.²⁷

Toxicity — Classified by the FDA⁶² as an unsafe herb, containing the “Poisonous alkaloid sanguinarine, and other alkaloids.” Chelerythrine and sanguinarine disturb mitosis. Dust of the root irritant to the mucous membranes, “The root is violently toxic.”¹⁸ Jim Duke experienced tunnel vision when he took a small bite of rhizome. Urine analyses subsequently suggested the presence of opium-like alkaloids! In toxic doses bloodroot causes burning in the stomach, intense thirst, paralysis, vomiting, faintness, vertigo, collapse, and intense prostration with dimness of eyesight.^{3,33}

To the physician — For poisonings, Hardin and Arena³⁴ suggest gastric lavage or emesis with symptomatic treatments. *Hager's Handbook* suggests warm milk for the nausea,³³ cardiac stimulants for impending collapse.³³