

rheumatism, smallpox, sore throat, toothache, tuberculosis, ulcers, urinary incontinence, and wounds. The plant has no significant antifertility effects in rats.⁵³

Per 100 g, the forage is reported to contain on a zero moisture basis 12.8 to 14.4 g protein, 1.8 to 3.9 g fat, 71.3 to 71.8 g total carbohydrate, 20.1 to 23.6 g fiber, 10.4 to 12.5 g ash, 1,330 mg Ca, and 360 mg P. Among the alkaloids are achiceine, achilletin, betaine, betonicine, choline, homostachydrine, moschatine, stachydrine, and trigonelline. Flavonoids include⁷³ apigenin, apigenin glycosides, artemetin, casticin, 5-hydroxy-3,6,7,4'-tetramethoxyflavone, isorhamnetin, luteolin, luteolin glucosides, quercetin glycoside, rutin (quercetin rhamnoglucoside). The volatile oil^{73b} contains allo-ocimene, allo-ocimene isomer, azulene, borneol, bornyl acetate, butyric acid, Δ -cadinene, camphene, camphor, carophyllene, chamazulene, chamazulene carboxylic acid, 1,8-cineole, copaene, cuminic aldehyde, p-cymene, eugenol, farnesene, furfural, furfuryl-alcohol, humulene, isoartemisia ketone, isobutyl acetate, isovaleric acid, limonene, menthol, myrcene, alpha-pinene, beta-pinene, sabinen, salicylic acid, sesquiterpene lactones (8-acetoxyartabsin, acetylbalchanolide, achillicin, achillin, 8-aneloxyartabsin, austricin, balchanolide, 2,3-dihydrodeacetoxymatricin, hydroxyachillin, leucodin, millefin, millefolide, proazulenes), alpha-terpinene, terpinen-4-ol, and terpinolene. The oil contains at least linoleic-, oleic-, cerotic-, myristic- and palmitic-acids.³³ Amino acids include alanine, glutamic acid, histidine, leucine, and lysine. The analgesic salicylic acid is reported. Some of the alkaloids are said to be weakly antipyretic and hypotensive. Achilletin reduces coagulation time in canines. Fresh leaves contain 0.058% ascorbic acid, dried leaves 0.31%.

Toxicity — Though not generally considered toxic, yarrow has been indicted at least in the literature for causing the rapid death of a calf who ingested one plant.^{73b} Some individuals show positive patch test reactions to yarrow and cross-sensitivity between other Asteraceae and yarrow has been demonstrated. FDA approval for use in alcoholic beverages only. Finished beverage must be thujone free. Yarrow oil normally contains little or no thujone, whereas sage oil may contain 50% (§ 172.510).²⁹