

161. *HAMAMELIS VIRGINIANA* L. (HAMAMELIDACEAE) — Witch Hazel

According to Grieve, the black nuts contain a white seed which is oily and edible.<sup>2</sup> Used in toilet water, face and body lotions, e.g., aftershave lotions and mouth washes.<sup>45</sup> Avery<sup>169</sup> suggests that witch hazel is our most widely known botanical (I would have said ginseng): “over one million gallons of witch hazel are sold each year.”<sup>169</sup>

Reported to be alterative, anodyne, antiseptic, astringent, hemostat, refrigerant, sedative, tonic, witch hazel is a folk remedy for backache, bruises, burns, cancer, diarrhea, dysentery, dysmenorrhea, gleet, hemoptysis, hemorrhoids, inflammation, lameness, menorrhagia, metrorrhagia, myalgia, ophthalmia, phlebitis, phthisis, tumors, ulcers, varicose veins, and wounds.<sup>4,32,33</sup> Amerindians poulticed the plant onto painful swellings and tumors. In the treatment of varicose veins, witch hazel should be applied on a lint bandage, which must be kept constantly moist . . . “a pad of Witch Hazel applied to a burst varicose vein will stop the bleeding and often save life by its instant application.” An enema of witch hazel tea “is excellent for inwardly bleeding piles, the relief being marvelous and the cure speedy.”<sup>2</sup> The twigs, leaves, and bark are used to prepare witch hazel extract, used to treat bruises and sprains. Fresh leaves are very astringent. Cherokee used the tea for colds, fevers, periodic pain, sore throat, and tuberculosis, and to wash sores and wounds. They bruised the leaves and rubbed them on scratches. Amerindians used the bark for painful tumors.<sup>41</sup> Menominee used the twigs for bad back, the seeds in sacred ceremonies. Mohegan used the twigs and leaves for bruises, cuts, and insect bites. Osage used in sores, tumors, and ulcers; Potawatomi used in steam bath for rheumatism and sore muscles; Seneca used it as a sedative.<sup>43</sup> “The many varied uses of a watery infusion of Witch-hazel bark were fully known to the aborigines, whose knowledge of our medicinal flora has been strangely correct as since proven. Its use in hemorrhages, congestions, inflammations, and hemorrhoids is now generally known . . .”<sup>19</sup>

Leaves contain *circa* 8% hamamelitannin  $C_{20}H_{20}O_{14}$ , which yields 68% gallic acid, also free gallic acid and hamamelose  $C_6H_{12}O_6$ , 0.2% choline, saponin; quinic acid, *circa* 7% of the resinoids hamamelin and hamamelidin. There is an essential oil with *circa* 40% alcohol, *circa* 15% esters, *circa* 25% carbonyl compounds, myricetin, quercetin, kaempferol, leucodelphinidin, leucocyanidin, myricetin-3-glucoside, isoquercitrin, astragalol, myricetrin, quercitrin, afzelin, spiraeoside, *n*-hexen-2-al-(1), acetaldehyde, alpha-ionone, beta-ionone, safrole, 6-methylheptadien-3-5-on-(2), and sesquiterpene. Bark contains 1 to 3% hamamelitannin, ellagic tannin, catechin-3-gallate, hamamelose, gallic acid, phlobaphene, 0.6% fatty oil, wax, saponin, 0.5% essential oil with sesquiterpene, and compounds like eugenol and safrole and *circa* 16% hamamelin.<sup>33</sup>

**Toxicity** — Contains the carcinogen safrole (though in much smaller quantities than sassafras), eugenol, and acetaldehyde.