

PHARMACOPŒIAL VEGETABLE DRUGS.

UVA URSI

Bearberry, *Uva ursi* (*Arctostaphylos uva ursi*) (Linné), which takes its name from the fact that its berries are eaten by bears and other animals, is a low evergreen shrub common to the Northern countries of Europe and America. The leaves, which are used in medicine, are an article of commerce in the northern sections of Europe, America, and some parts of Asia. Being used in tanning, in Sweden and Russia, according to Rafinesque (535), they established the well-known Russia leather. The astringent leaves were once highly valued in Europe, but have since fallen into disuse. The domestic employment of the drug introduced it to American medicine, Drs. Wistar, Barton (43), and Bigelow (69) recommending a decoction of it as a wash for leucorrhœa and as an injection in gonorrhœa and catarrh of the bladder. For these purposes, as based on its domestic employment, the plant has its professional record, but has never been very important in any school of medicine.

VALERIANA

The herbaceous perennial *Valeriana officinalis* is found throughout Europe from Spain to Iceland, extending also from the Crimæa, over Northern Asia, into China. It not only grows wild, but in England especially is cultivated as a drug plant. It was known to the Greeks and Romans, and the *wild nard* described by Dioscorides (194) and Pliny (514) is supposed to be a species of valerian, of which, in addition to the *Valeriana officinalis*, nine species are found in Asia Minor. The name *valerian*, however, was not used by the classical writers, occurring first in the ninth and tenth centuries. It is found in the Anglo-Saxon names of home remedies, and in domestic books as early as the eleventh century. Saladinus (570) of Ascoli, 1450, directed that the root be collected in the month of August. In mediæval days in England the flavor of valerian was considered by the common people a delightful addition to broths and pottages, Gerarde (262) in his *Herball*, 1567, remarking that the poorer classes of people in the north of England did not consider such forms of food worth anything without it. Strangely enough also the odor of valerian, now considered exceedingly disagreeable, was in the sixteenth century accepted as a perfume, and as a perfume it is still used in the Orient. In this connection we will add that we have known valerian to be a constituent of a perfume very popular with some ladies, but exceedingly unpleasant to some other people. In domestic medicine a tea from the root of valerian has been employed as a stimulant and antispasmodic in nervous diseases peculiar to females.

VANILLA

The conquering Spaniards found vanilla in use as a flavor for cacao among the Aztecs of Mexico, and naturally made this plant known to Europe. It was then described and illustrated by Hernandez (314), the "Pliny of the Spaniards," in his history of Mexico, who de-

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scribed it under both the botanical name, "aracus aromaticus," and its vernacular name, "tilxochitl." Clusius (153) mentions it in 1602 as "lobus oblongus aromaticus." Pomet (519), in 1694, reports the use of vanilla in France to flavor chocolate and sometimes to perfume snuff. As early as 1721 vanilla was introduced into the London pharmacopeia, and in 1739 Mr. Ph. Miller (437) planted some vanilla specimens (*vanilla aromatica*, Swartz) in the Chelsea botanical garden. In the West Indies and the adjoining coast of South America vanilla has also long been known.

In 1724 P. Labat (365), a Catholic missionary, reports (from hear-say) the abundant occurrence of vanilla in the "terre ferme" of Cayenne, from which place specimens were forwarded to him in 1697 to Martinique, where he cultivated the plant and observed its habits for eight years. He also planted vanilla in Guadeloupe. In 1750 P. Gumilla met vanilla in the Orinoco country. To Humboldt (331) we owe the first authentic and detailed report on Mexican vanilla. The Mexican Province of Oaxaca supplied the first vanilla export to Spain, and the bean was discovered in this province by De Menonville (*Gardeners' Chronicle*, May, 1874) in 1777. Vanilla forests, according to old archives, have been in cultivation at Papantla, near Vera Cruz, as early as 1760.

The species yielding the finest-flavored vanilla, subsequently named *vanilla planifolia*, Andrews, was imported from America into England by the Rt. Hon. Charles Greville (*Hortus Kewensis*, Vol. v, 1813), this flowering in his collection at Paddington in 1807 (57). Specimens of this plant were later transferred to Paris and Belgium, from whence the botanical gardens of Reunion (Bourbon) and Java were supplied. In 1830 Neumann introduced the artificial fecundation of *Vanilla planifolia* in the Jardin des Plantes at Paris, and in 1837 Professor Morren did the same at Liege (239). The Java plantation, started in 1841, now supplies the Dutch market solely.

The Reunion plantation, according to Delteuil, was started by Perrotet in 1839 (239). The cultivation of vanilla for the purpose of export was subsequently introduced into other French colonies—e. g., into Mauritius by M. Richard (550), into Guadeloupe (in 1875), Martinique, Ste. Marie (near Madagascar), and into Tahiti of the Society Islands. In Jamaica individual attempts to cultivate vanilla are on record. The cultivation in Calcutta, however, according to reports by Dr. King, seems to be a failure. (*Phar. Journ. & Trans.*, Nov., 1876.) Suggestions have been made of a more energetic prosecution of the vanilla culture in Jamaica, in Venezuela, and Guiana; also of an introduction of this article into the extreme southern parts of the United States, Florida, and Texas. For a historical treatise on all the aspects of vanilla and its cultivation see (388) *Vanilla planifolia*.

VERATRUM VIRIDE

This is quite a common plant in many parts of the United States, particularly in the eastern states, where it grows in swampy places, wet meadows, and along the borders of streams. It is usually well known

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to the people in sections where it is found, who call it itch-weed, Indian poke, poke-root,* or American hellebore, swamp hellebore, etc. The earliest travelers made mention of it. Josselyn (345) records that it was used as an ordeal test by the American Indians, somewhat on the same order as the ordeals by the negroes of Africa at the present day. He supposed it was the same as *Veratrum album* of Europe, and notes its abundance, stating "that you may in a small compass gather whole cart-loads of it."

Peter Kalm (350) states that it is very common in marshy places and frequently causes the death of stock which eat the young leaves in spring; also that the settlers employed a decoction of the root to poison the seed-corn, to prevent the birds from eating it;† and also that the root was used as an insecticide.

According to Loudon the plant was introduced into Europe in 1742, though most authorities ascribe to Peter Collinson its introduction in 1763 (8). It was named and described in the first edition of Aiton's *Hortus Kewensis* (vol. 3, p. 422, 1789) as *Veratrum viride*, and Aiton by most writers is given as the author of the name. In justice, however, the credit should be given to William Solander, an English botanist and illustrious pupil of Linnæus, who (although no mention of the fact is made in the publication) furnished the descriptions and nomenclature of the new species described in Aiton's work.‡

Veratrum viride is conceded by all modern botanists to be a distinct species; it is so close, however, to *Veratrum album* of Europe that the early explorers of America and some of the earlier botanists and travelers—Michaux (433) (*Flor. bor. am.*, Vol. II, p. 249), Josselyn (345), Kalm (350), David Schöpf (582)—thought it was the same species. Certainly the rhizomes of both plants bear a close resemblance to each other, even in their microscopical aspects. (E. S. Baslin, *Am. Jour. Phar.*, 1895, p. 196.)

VIBURNUM OPULUS

High cranberry, *Viburnum opulus*, known also as *cramp bark*, is a shrub growing in swamps and damp localities of the Northern United States. The bark of this shrub was used by the Indians as a diuretic, a decoction being freely employed. According to Rafinesque (535), pills and plasters were also devised from this plant, and the bark was smoked, instead of tobacco, by some of the Western Indian tribes. The leaves of *Viburnum opulus* and other species were used by the Indians as a tea, and also by the settlers of the Southern States in early Colonial days. The domestic use of *viburnum* did not impress the medical profession to any extent until the day of Beach (49), as is evidenced by the fact that such conspicuous authorities as Zollickoffer (706), and even the United States Dispensatory, 1833 edition, neglected to mention either the plant or its uses.

* A name universally employed for *phytolacca decandra*.

† The statement being that the marauding birds were sickened and did not return.

‡ Dictionary of National Biography. "Aiton, Wm." New York, 1885 to date.

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VIBURNUM PRUNIFOLIUM

Black haw, *Viburnum prunifolium*. The bark of this tree was employed in American domestic medication during the first part of the nineteenth century. The first authentic reference we have observed is in the *American Family Physician*, by Professor John King, M. D. (356), 1857, where the drug is described and the statement made that it acts as a uterine tonic, its uses being practically those now recorded in medical literature. In 1860 Dr. I. J. M. Goss (*New Preparations*, 1878, p. 61) commended the drug, probably brought to his attention through the writings of King, as well, possibly, as from its local employment in his part of the South. He introduced it into his own practice and commended it to his professional friends. From this date black haw grew rapidly in favor, and through repeated publications, in medical as well as pharmaceutical literature, came into extensive demand, being finally given a position in the Pharmacopeia of the United States.

XANTHOXYLUM

Prickly ash, *Xanthoxylum americanum*, is a shrub native to North America, being somewhat abundant in localities where it is found, between the Mississippi River and the Western States. Long a domestic remedy, it became a favorite in the Eclectic school of medicine by reason of its use during the prevalence of the Asiatic cholera in Cincinnati, 1849, in which it was employed by them with great satisfaction. It had, however, as stated, a domestic as well as a seemingly professional record preceding that date, the same reaching back to the primitive medication of the Indians. Barton's Collection (43), Zollickoffer's (706) *Materia Medica* (1826), and other authorities on the domestic remedies of North America mention it conspicuously, the latter writer stating that the berries were used to relieve the toothache, a decoction of the bark in the treatment of rheumatic affections, whilst the country people employed an infusion of the berries in colic. It was therefore a popular remedy, possessed of marked carminative qualities, that, impressing such men as Barton (43), Thacher (631), King 356-357), Zollickoffer (706), and others, brought it into professional recognition. Prickly ash berries are used in large amount in some of the American proprietary remedies.

ZEA (STIGMA MAYDIS)

Corn Silk (*Zea*, or *Stigmata maydis*) seems to have crept into the notice of the medical profession in Europe before it had any conspicuity in America. In 1878 (*Revista de Madrid*), a Dr. Betherand mentioned it in print. Long preceding that date, however, a tea of corn silk had been employed in American domestic practice as a remedy for acute affections of the bladder. Dr. John Davis, a well-known Cincinnati physician, repeatedly informed the writer that, in his opinion, a decoction of corn silk, together with a decoction of dried pods of beans, was the most effective of all diuretics he had employed in his practice,