

SCIENTIST RALPH CHAMBERLIN WRITES ABOUT GOSHUTE ETHNOBOTANY



Goshutes Growing Alfalfa

VEGETAL PRODUCTS USED AS FOOD

It was, however, on the products of the plant kingdom, as available in the flora in some features touched above, that the Gosiute placed their chief dependence for food, a fact that in trapper and pioneer days led to their being included under the omnibus and odious designation of "Diggers," or "Root Diggers." Living close to nature and impelled by strict necessity, they knew the plants of their region with a thoroughness truly surprising. From root to fruit they knew the plants in form and color, texture and taste, and according to season and habitat. Whatever portion of a plant could serve in any degree for food they had found out; and what would poison or injure they knew to avoid. From plants, too, they obtained most of their medicines, which were many, as well as the materials for making most of their household and other utensils. The education of the Gosiute children in a knowledge of these and other matters important to them in their original state was formerly given with much care by the grandparents; but since the change in mode of life consequent on the coming of the white race, this education, or drill, is much neglected. As a result the knowledge concerning plants and their properties possessed by the younger generations is very inferior to that of the older men and women now fast passing away.

The Gosiute ate the leaves and stems of many plants as "greens" after boiling them in water according to the usual custom. Some members of the *Curciferæ* and *Compositæ* containing acrid or otherwise distasteful oil or other principles were sometimes taken through a preliminary course of repeated washings to remove the objectionable taste so far as possible, after which they were cooked and eaten as usual. The leaves and petioles of the arrow-root (*Balsamorhiza sagittata*), termed *ku'-si-a-kën-dzîp*, furnished one of the most used and dependable foods of this type. This is an abundant and conspicuous member of the early season flora throughout the region. The hastate leaves of this plant, mostly radical and forming a tuft, are eight or nine inches long with the still longer petioles and the flowers are large yellow heads like those of the sunflower. *Cymopterus longipes* (*an-dzûp'*) is an umbellale, widely distributed and abundant like the preceding form. It is an early spring plant with more or less tufted

leaves of pinnately decompound form, and with umbels of yellow flowers. The leaves of this plant in season furnished a standard and favorite dish. The leaves of the closely related *Cymopterus montanus* were not eaten, but the caudex and basal portions of petioles occasionally were. . . .

Of the plants that furnished food to the Gosiute in the form of roots, root-stocks, tubers, and bulbs, none is popularly so well known as the beautiful *Calochortus nuttallii* - si'go to the Indians and hence "sego" the common name among the white residents of Utah. It is the State flower. The bulbs of this lily were formerly gathered and used for food. Not only were they eaten in season, but they were preserved in quantity for winter use by being dried and placed in pits, like those hereafter to be described, from which they were taken as needed, and were then most commonly cooked with meat in the form of stews. When the Mormons first arrived in Utah and the struggle for food was so severe with them, they learned from the Indians the value of this article; and the digging of sego bulbs in the spring did much in many families to ward off starvation. . . .

MEDICINAL PLANTS

. . . . The great majority of the many medicines used by the Gosiute were products of the plant kingdom, though to a limited number of animal substances and preparations curative qualities were attributed. As above stated, some were of unquestioned service, containing active principles identical and related closely in not a few cases to those of plants used or formerly used by our own practitioners. Often several different medicines might be used for the same ailment, or what was regarded as the same, the one selected depending on season, availability, or personal preference. In some cases medicines were combined and given as a mixture, in which case each constituent is supposed to exercise its own peculiar virtue. Medicines were classified according to use, the classification being in correspondence with the categories of disease. Thus medicines for wounds and cuts were classed as i'-a-na-tsu; for bruises and swellings, bai'-gwi-na-tsu; for burns, wai'-a-na-tsu; for coughs and colds, o'-ni-na-tsu; for bowel troubles, koi'-na-tsu; for "worms," wu'-i-na-tsu; venereal diseases, tim'-bai-na-tsu; for rheumatism, tso'-ni-na-tsu; for the blood, bu'-i-na-tsu; for bladder and kidney troubles, si'-na-tsu; etc. . . .