

LILY FAMILY (*Liliaceae*)

ZYGADENUS OR DEATH CAMAS (*Zygadenus venenosus* Rydb.)
(*Toxicoscordion gramineum* Rydb)

PLATE VII. FIG. B.

COMMON NAMES: *Zygadenus* is popularly known by a great variety of names, death camas being, perhaps, the most familiar. Other common names are poison-onion, poison-lily, poison-sego, camass, hog's-potato, mystery-grass, alkali-grass, soap-plant, squirrel-food, and lobelia. The last mentioned should not be used as it causes confusion with another poisonous plant, the Indian tobacco (*Lobelia inflata* L.).

DESCRIPTION: The death camas is one of the spring and summer flowers of the West. It is an erect, perennial herb growing from a coated bulb. The leaves are grass-like, long, narrow, and keeled, so much resembling the leaves of a grass or sedge that they are often overlooked in the search for poisonous plants. The flowers are arranged in an elongated cluster or *raceme*, simple or branched, at the top of the central flower-stalk, which is from ten to twenty inches high, rising above the leaves. The flowers are numerous, small, about one-quarter inch in diameter, yellowish or greenish white, each subtended by a leaf-like bract which is shorter than the slender stalk. The flowers bloom from about the middle of May to the end of July, but the flowering period varies with the season and altitude. The seeds ripen in their three-parted erect capsules in July and August, and germinate the following spring, producing the bulb and leaves only during the summer. The flowering stalk appears the year after. The plants grow more or less as scattered individuals, but sometimes in large masses or patches. These patches of the flowering plants are easily distinguished, even at some distance, by their peculiar greenish-yellow colour.

DISTRIBUTION: *Zygadenus* grows abundantly on many of the stock ranges of the West. It is found generally distributed from Saskatchewan to British Columbia. It is native to Canada.

POISONOUS PROPERTIES: The poisonous principle of death camas is an alkaloid, *zygadenine*, allied to *veratrine*, which is found in all parts of the plant. The toxicity of the flowering tops and the bulbs is about the same, but the seeds are much more toxic than other parts of the plant. Cases of poisoning, however, are more liable to occur early in the season, before the plants are in flower, as at that time the fresh green leaves are most tempting to stock, long deprived of green food. After seeding, the plant withers.

ANIMALS AFFECTED: In reference to death camas, T. N. Willing says: "Large numbers of sheep have been affected in the early summer by the prevalence of this weed (in southern Alberta) amongst the grass on which