

Plants of the Nightshade Family in North Dakota

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HERBS or shrubs with alternate leaves; petals united into a saucer-shaped or funnel-shaped corolla which often has pointed or rounded lobes; stamens 5, attached to base of corolla; pistil 1; fruit a many-seeded berry or pod. A large and important family, containing many drug plants (see No. 9), food plants such as potato, tomato, egg plant, pepper, and ornamentals such as petunia.

Key to Species and Genera

Keys are much used to aid in identifying specimens. They are like signboards along a highway. At each fork of the road a sign shows what lies in that direction. One follows the signs until he reaches a destination, in this case a name at the end of a line.

Fruit a pod; dry, splitting open when ripe.

Pod not prickly, opening by a lid.

9. *Hyoscyamus niger*

Pod prickly, splitting down the sides.

Leaves prickly; flowers yellow, 2 cm.
(3/4 in.) wide.

5. *Solanum rostratum*

Leaves not prickly; flowers white, 1 dm.
(4 in.) long.

10. *Datura stramonium*

Fruit a berry; seeds in a soft pulp.

Woody, thorny plant; flowers purple.

8. *Lycium halimifolium*

Herbs, not thorny; flowers yellow or white.

Berry loosely enclosed by enlarged calyx.

1-3. *Physalis*

Berry not enclosed by calyx.

Flowers yellow; leaves much divided.

7. *Lycopersicon esculentum*

Flowers white; leaves entire or toothed.

8. *Solanum*

Physalis—Groundcherry

Annuals or perennials with simple leaves and yellow flowers borne singly at leaf bases; calyx and corolla cup-shaped, calyx 5-toothed; much enlarged in fruit, loosely enclosing a berry. An interesting form, sometimes grown as an ornamental, is Chinese-lantern Plant (*P. alkekengi*), the calyx of which becomes bright red.

Key to Species

Leaves covered with short, sticky hairs.

3. *Physalis heterophylla*

Leaves not sticky; hairs fewer, forked.

Fruiting calyx sharply 5-angled.

2. *Physalis virginiana*

Fruiting calyx rounded.

1. *Physalis lanceolata*

¹This article is part of "A Flora of North Dakota" being prepared by Prof. O. A. Stevens. This section is being published as trial sheets. Comments are invited. H. L. W.



Figure 1.—A, Groundcherry (*Physalis virginiana*).

1. *Physalis lanceolata* Michx. Perennial from deep root; stems slender, 2-6 dm. (8-24 in.) high, leaves lanceolate with wavy edges, 2-5 cm. ($3/4$ - 2 in.) long; flowers yellow with brownish center, 2 cm. wide; mature berry yellow, 1 cm. wide; calyx rounded, 2 cm. long. Sandy prairies. We have specimens

from only the southeast, Richland to Barnes and Dickey Counties and from Grant and Golden Valley Counties in the west. *P. ixiocarpa*, a groundcherry often cultivated, resembles this species, but has a flower with purple center and a purplish berry. It is an annual and will volunteer from seed.