

# *Pedicularis spp.*

Plant Family : Orobanchaceae

(formerly of the family Scrophulariaceae)

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Materia Medica

Research Presentation

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*Pedicularis groenlandica*

### ***What's in a name?***

The genus *Pedicularis* is named from the genus of lice, *Pediculus*, as it was once thought that farm animals grazing on these plants were more likely to be infested with lice. The common name, “Lousewort”, also derives from the common name for a single lice, which is “louse.” In actuality, most animals graze on lousewort when there is nothing else to eat, thus they may be more prone to lice infestation due more to poor grazing conditions than to the presence of lousewort in their diets. Although interesting and historical, none of these names have anything to do with its use as an herbal remedy.

Plants of the *Pedicularis* genus are also commonly referred to as “Betony” or “Wood Betony”, which leads to a confused association with an unrelated (but medicinally similar) plant, *Stachys officinalis* (*Betonica officinalis*).

On a more logical note, a common species found in the high moist elevations of the Rockies, *Pedicularis groenlandica*, was first identified in Greenland. Thus, the name *groenlandica* means “of Greenland.”

### **Noted Species**

*Pedicularis attollens*, *P. bracteosa*, *P. centranthera*, *P. contorta*, *P. densiflora*, *P. grayi* (*procera*), *P. groenlandica*, *P. parryi*, *P. racemosa*, *P. canadensis*

\* Medicinally, species are interchangeable\*

### **Common Names**

Lousewort, Elephant Head, Parrot's Beak (Sickle-top Lousewort), Fern Leaf Betony (Bracketed Lousewort), Indian Warrior

### **Habitat**

*Pedicularis* is commonly found at higher elevations (above the Ponderosa belt) in the Rockies, frequenting open marshy areas, shady slopes, meadows, and hollows. Given enough moisture, they often occur in large masses. Mid-western and northeastern environments include dry prairies, savannas, and woodlands. As more than two dozen *pedicularis* species inhabit the western United States, it may be found in every western state except for Texas.

Though they produce their own chlorophyll, *Pedicularis* plants are considered “generalist” root hemi-parasites, tapping at least 80 different plant species via lateral root connections through which they extract water, carbon, nitrogen, minerals, and other constituents (including alkaloids).

Common host plants include oak, asters, Senecio, conifers, willow, aspen, lupine, raspberry, rose, and grasses. When harvesting *Pedicularis*, it is essential to note what plants are growing nearby and may be contributing constituents which will reside in the *Pedicularis* you collect. The properties derived from host plants may be beneficial, benign, or toxic:

Oak, raspberry = astringency

Willow, aspen = analgesic

Conifers = Heating aromatics

Senecio, lupine = Toxic alkaloids

**\*Remember\***

**Pedicularis = Pedicularis + Host**

The ability of *Pedicularis* to pull from host plants water for its young seedlings and constituents that repel insects and wildlife may allow it to thrive in areas where drought and wildlife pressure might otherwise negatively affect its survival.

This ability also has far-reaching effects on the entire ecosystem in which it lives, as *Pedicularis* may selectively parasitize and inhibit aggressive tall plants such as Goldenrod and Big Bluestem, resulting in a more open canopy for shorter plant populations to grow. Plant diversity is thus increased in areas where *Pedicularis* thrives.

Nectar-rich *Pedicularis* flowers also attract bumble bees, enhancing pollination of pollen-poor neighboring species such as May apple.

Because *Pedicularis* is not particularly “weedily” abundant and is in fact on “to watch” lists in some areas, care should be taken when wild-harvesting this plant.

Because it is almost impossible to cultivate, wild populations of Pedicularis are the sole source of its medicine, and thus consideration in harvesting is obligatory.

### Medicinal Qualities

- *Skeletal Muscle Relaxant, especially upper back, shoulders, & neck*
- *Relaxant Nervine*
- *Relieves skeletal muscle soreness, especially at insertion point*
- *Relieves tension headaches*
- *Great for osteoarthritis associated with repetitive activity*
- *In Chinese medicine, used to relax tight connective tissue/tendons*
- *Works well for some folks, and not for others*
- *Combines well with Black Cohosh, Skullcap, Valerian, Jamaican Dogwood*
- *Energetics & taste = Bittersweet, spicy, warming effect*



## **Parts Used**

Above ground leaves, supple stems, flowering tops;

Collected June-August when in full bloom from mid-high elevation meadows  
and streamsides.

## **Preparations**

Herb in flower:

Fresh plant tincture 1:2 in 95% alcohol; 10 drops – 2 tsp., 3 x daily

Dried plant tincture 1:5 , 50% alcohol; 10 drops -2 tsp., 3 x daily

Standard infusion; 2-8 oz., 3 x daily

## **Safety**

Good safety record; negative side effects uncommon

(so long as potential host toxicities are not present)

May cause spaciness, mild disorientation, “limp noodle” effect

## **Primary Constituents:**

*Verbascoside, euphroside, geniposidic acid, planterenaloside, forsythoside*