

## Plant Data Sheet



**Species (common name, Latin name)** – Columbia monkshood, *Aconitum columbianum*.

**Range** - Alaska south to California (perhaps as far as Mexico), east to the Rocky Mountains

**Climate, elevation** – In the Lowlands to Subalpine zone.

**Local occurrence (where, how common)** – Monkshood is common on the eastern slopes of the Cascades. The plant is present in the Cascades, but not in the Olympics.

**Habitat preferences** – Along streams, near springs, seepages, in moist woods (in dappled shade) and wet meadows.

**Plant strategy type/successional stage (stress-tolerator, competitor, weedy/colonizer, seral, late successional)**

**Associated species** –Forbs that monkshood occurs with include alpine leafybract aster, ladyfern, field horsetail, cow parsnip, skunk cabbage, arrowleaf groundsel, stinging nettle, California false hellebore, American speedwell, and pioneer violet. It also grows with hardwoods such as black cottonwood, quaking aspen, white alder and, in northeast Washington, paper birch.

**May be collected as: (seed, layered, divisions, etc.)** – Collect as seed, sow in mid-summer. Divisions can be collected and planted in the spring or fall.

**Collection restrictions or guidelines** - Roots, leaves and sometimes flowers contain violent poisons! The whole plant is highly toxic. Skin contact can cause numbness in some people.

**Seed germination (needs dormancy breaking?)** - Sow outside during the late fall or early winter for germination the following spring. Start indoors if you plan to plant in spring. To sow inside, place seeds in water or moistened soil and freeze for three weeks. Germinate at cool temperatures between 55 and 60 degrees. The seeds are best sown as soon as they are ripe in a cold frame.

**Seed life (can be stored, short shelf-life, long shelf-life)** – The seed life is very short for monkshood. Plant as soon as they are ripe.

**Recommended seed storage conditions** – Do not store the seeds if possible, plant right away. If you need to store the seeds, dry them out.

**Propagation recommendations (plant seeds, vegetative parts, cuttings, etc.)**

The preferred method of propagation is by seed (seed depth: 1/8 "), but it may be propagated with divisions of the thickened, tuberous roots. Sow seed just before or when ripe (otherwise there will be a long dormancy that is difficult to break). For division, separate roots in late fall or early spring. **Soil or medium requirements (inoculum necessary?)** Monkshood can grow in soil ranging from light (sandy) to heavy (clay), as long as the soil is moist. The plant grows in acid, neutral and basic (alkaline) soils. It can grow in semi-shade (light woodland) or no shade. In soils rich in organic matter, extra fertilizer isn't usually necessary. In other soils, use a general-purpose fertilizer in spring. 2- to 3-inch-deep layer of mulch around the plants is beneficial, especially in warm-summer or dry areas. This layer of mulch helps conserve soil moisture and prevents the soil temperature from becoming too warm.

**Installation form (form, potential for successful outcomes, cost)** – If you choose to sow seeds, do so in autumn, as soon as they are ripe. The seeds should germinate in the spring, though it can take more than a year after sowing. It generally takes several years for the plants to flower from seed. To install divisions, divide large clumps in spring or autumn. It may take the plants some time to recover from division as they resent disturbance. Transplanting monkshoods can prevent them from flowering for a year or two.

**Recommended planting density** – Space seeds 1" apart. They should emerge in 30 days. When the plants are 1" tall, thin to 15 inches apart.

**Care requirements after installed (water weekly, water once etc.)** - Moisture: Keep the soil moist, but not wet. Cut down dead stalks in autumn after they freeze or in early spring before the plants begin to grow.

**Normal rate of growth or spread; lifespan** – Monkshood is "a greedy plant" that inhibits the growth of nearby species, especially legumes.

### Sources cited

Morris, R. *Plants For A Future*: 1997-2000. Blagdon Cross, Ashwater, Beaworthy, Devon, UK.  
Website: <http://www.pfaf.org/>

National Home Gardening Club. 2003. <http://www.gardeningclub.com/document.asp?dID=2433>

Northwest Habitat Institute. 2003. Interactive Biodiversity Information System [http://www.nwhi.org/ibis/queries/wildhabs/WHDF\\_H25.asp](http://www.nwhi.org/ibis/queries/wildhabs/WHDF_H25.asp)

Stewart, C. 1994. *Wildflowers of the Olympics and Cascades*. Nature Education Enterprises. Port Angeles, Washington.

Taylor, R.J. and G.W. Douglas. 1995. *Mountain Plants of the Pacific Northwest: A field guide to Washington, Western British Columbia, and Southeastern Alaska*. Mountain Press Publishing Company. Missoula, Montana.

**Data compiled by (student name and date)** – Daniela Shebitz April 23, 2003