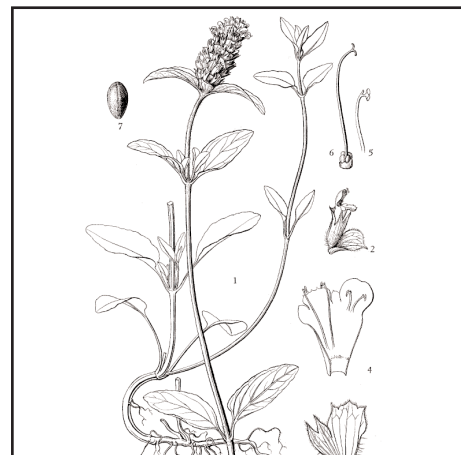


A Grower's Guide

All Heal/Self Heal

Prunella vulgaris

This European herb is often used to stop bleeding. Because the flower spikes resemble the throat, the herb was also used to treat inflammations of the mouth and throat. In Chinese medicine, the flower spikes are thought to be useful for the liver and gallbladder, especially cooling an over-heated liver, called “gan hao” or “liver fire,” from which the phrase “gung-ho” is thought to have derived. In western herbalism, leaves and young shoots are applied to fresh wounds to stop bleeding and clean cuts. Other common names include woundwort, heal all and carpenter’s herb.



Family: *Lamiacea*

Life cycle: Herbaceous perennial
(Zone 4)

Native: Europe, Asia, and most temperate regions of the world. Naturalized in parts of North America from Eurasia.

Height: 6 to 18 inches

Sun: Common in woodlands and forests. Also found in mountain meadows. Does well in partial shade. Tolerates full sun.

Soil: Prefers a humus soil.

Water: Moderate. Will survive under dry-land conditions in Kansas.

Flowers: Attractive and vary in color from pink to purple to white. Bloom in early and midsummer for nearly two months. A well-behaved ground cover in the garden.

Propagation: Stratify seed for at least one month before sowing. Start indoors and watch for germination within three weeks. Transplant outdoors in mid- to late

spring. Plant 10 to 12 feet apart in rows or beds.

Pests: Few observed or reported.

Harvesting: Harvest the aerial parts while it is in flower. This may have to be hand harvested with snips or scissors because the plant is low growing. May also have to rinse dust from leaves after harvest because the plants get dirty from rain splash.

Parts used: Entire aboveground flowering plant

Used as: Can be made into tincture, syrup, compress, tea, poultice, elixir, ointment, slave, balm, etc.

Medicinal benefits: Unproven uses include for inflammatory diseases, ulcers in the mouth and throat and gastrointestinal catarrh. A remedy for diarrhea, hemorrhage and gynecological disorders. Recent research suggests the plant possesses antibiotic, hypotensive and anti-mutagenic qualities. Contains the anti-

tumor and diuretic compound ursolic acid. Rich in natural antioxidant compounds and contains more rosmarinic acid than rosemary.

Market potential: Moderate. Seek companies that make topical preparations and flower essences. Herb prices range from \$20.35 to \$56.80 per pound (lb) dry weight.

Summary of field trial data: This plant had good survival from transplants in replicated plots in Olathe, Wichita and Hays. First-year yield of the aboveground portion was not bad (close to 1 ton) considering the hot, dry conditions of 2002. The 2003 data is still being evaluated, but it looks as though the plant had moderate survival as a perennial. It had a vigor rating of 3.6, which is above average. This is surprising because it was grown under field conditions with full sun while it is traditionally a woodland herb. When harvested in its prime, this plant appears to have few insect or disease pests, but dur-

ing fall harvest, which is past the prime blooming time, the plants' leaves are prone to attack by various pests. The potential for this crop in Kansas will depend on whether there is a market that justifies hand harvesting and washing.

K-State Field Trial Data 2000-2002 <i>Prunella vulgaris</i>					
				Average	Comments
Age of plants in years	1	2	3		
Number of test sites¹	3	0	0		
Survival rate (%)	85.0	—	—	85.0	
Vigor rating²	3.6	—	—	3.6	
Height (cm)	18.3	—	—	18.3	
Dry weight herb (g/plant)	36.4	—	—	—	
Dry weight root (g/plant)	12.2	—	—	—	
Maturity rating³	4.7	—	—	4.7	
Insect damage rating⁴	0.6	—	—	0.6	
Disease rating⁵	1.2	—	—	1.2	
Estimated planting density (number of plants/A)	29,040	—	—	—	Assume 1- by 1.5-ft. plant spacing.
Plant density⁶	24,684	—	—	—	
kg/A dry weight (g/plant x plant number) – tops	898	—	—	—	
Estimated marketable yield (dry weight lbs/A) – tops	1,979	—	—	—	
Yield x ½ of low price¹	\$20,136	—	—	—	
Yield x ½ of high price¹	\$56,204	—	—	—	

¹ See "How Data Were Collected," on page 3.

² Vigor rating (1=very poor, 3=slightly above average, 5=very good, well adapted)

³ Maturity rating (1=vegetative, 2=early bud, 3=early flower, 4=full flower, 5=seed production, 6=senescence)

⁴ Insect damage rating (scale of 0 to 5; 0=no damage and 5=severe damage)

⁵ Disease rating (scale of 0 to 5 with 0=no damage and 5=severe damage)

⁶ Calculated as starting plant density x survival rate.

How Data Were Collected

The plants described in this fact sheet were grown in K-State test plots in Hays, Colby, Wichita, or Olathe, Kan. Generally, four replications of each species were included at a site. Not all species were screened at each site or each year. The number of locations is noted in the table. Depending on the location and year, either five or 10 plants per plot were established in each of the replications. Details can be found at www.oznet.ksu.edu/ksherbs. Plants were grown from seed in the greenhouse and transplanted in the field in May or June.

All plants at each location were used to determine survival percentage, vigor rating, insect damage rating, and disease rating as described above. Three plants per plot were measured for height, and only one plant per plot was harvested to measure yield each year. Cultivating four plots allowed us to estimate yield from four plants at each location per year.

Plants were dried, and top and root weights recorded in grams. Grams per plant were converted to kilograms per acre (kg/A) and pounds per acre (lb/A) to estimate field-scale yield. The population density used to calculate field yields was the optimal population density (determined by the average size of the plants) times the actual percentage survival as measured in the field. There was generally some loss due to transplant shock and, for some species, significant winter loss as well.

Plant spacing recommendations on each fact sheet are for spacing within a row. Distance between rows will depend on the particular farming operation and equipment used. The minimum row spacing will be the same as the plant spacing recommendation. For example, if the recommendation is to set plants 12 inches apart, rows should be a minimum of 12 inches apart as well. However, if cultivator or root-harvesting equipment is on 5-foot centers, plant rows 5 feet apart to facilitate cultivating and harvesting. Adjust estimated plant density per acre on the worksheets to estimate gross yield and net income.

Prices were taken from Appendix B of K-State Research and Extension publication S-144 *Farming a Few Acres of Herbs: An Herb Growers Handbook*. To calculate a rough gross income potential for each herb, estimated yield was multiplied by the lowest and the highest retail price, divided by two. This is a rough estimate of wholesale price. Actual prices would be determined based on a contract obtained from a buyer.

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