

**Astragalus membranaceus**, (Fisch.) Bge.

Common name: Astragalus, Milk Vetch  
Pinyin: huang qi  
Part used: Root  
Family: Fabaceae



Chinese product

### Plant Description

Resembling other members of the pea family, Astragalus grows to 3' tall with somewhat rambling stems. The pinnately compound leaves are bluish – green in color. Astragalus is a deciduous perennial. Blossoms form out of leaf axils and develop into racemes with yellow pea-like flowers, maturing into 1" long seed pods. Naturally occurring as far north as Mongolia<sup>1</sup>, Astragalus can generally be considered hardy, traditional USDA zones 7-10.

### Propagation

Seeds are sown in the spring or fall, but because they have a hard seed coat it is common practice to scarify by rubbing with sandpaper or nicking with a sharp knife, nail clippers etc. Soaking the seed overnight is another method to aid germination. Here at the Chinese Medicinal Herb Farm we have found good germination without employing scarification methods. Germination takes place in 6-20 days with bottom heat. It is also common to use an inoculant indicated for vetches. Plants are drought tolerant in pots and field. Nursery media should be extra well-draining. Do not over water. Over watering is the most frequent reason for Astragalus to die.

### Field Production

Grow Milk Vetch in a sunny location in very well drained, sandy soil. Fertilizers and compost are not recommended. Plant or sow 1' apart. Direct seeding has brought good results. Seed emergence is variable and takes place from 1-4 weeks. Transplants can be field planted from 14 weeks to 1 year if the pots/cultivation boxes are deep.

### Pest

Gophers are a major pest, deer to a much lesser extent.

### Harvest

Roots are dug while dormant in the fall after 4 years growth. The whitish-yellow roots grow 3-4' straight down, making hand harvesting the norm as machine harvest would miss much of the root. Check the roots for pithiness or any potential rot as it may not be initially obvious. Wash thoroughly and dry by cutting the roots lengthwise. Charles Martin from the New Mexico State University Alcalde demonstration garden, USDA zone 5, reports that 2 year old plants yielded 295 lbs of dried roots per ¼ acre. Note: Astragalus is a 4 year crop. Richters Herbs offers Astragalus yields as 6,232 lbs per acre, with a spacing of 10" in row and 3' between rows.<sup>2</sup>

<sup>1</sup> Dan Bensky and Andrew Gamble, *Chinese Herbal Medicine Materia Medica* (Eastland Press, 1993), p. 319.

<sup>2</sup> [http://www.richters.com/progrow.cgi?search=Chinese\\_MilkvetchXX\\_Astragalus&cart\\_id](http://www.richters.com/progrow.cgi?search=Chinese_MilkvetchXX_Astragalus&cart_id) (accessed January 4, 2005)