

# 'Lana' Woollypod Vetch

*Vicia villosa subsp. varia* (Host) Corb.

## Description

'Lana' vetch is an annual, early maturing, cool-season legume. It grows rapidly to a height of 18–27 inches. 'Lana' vetch has a climbing tendency, and will use any available support, such as the stiff stems of grasses and grains. This vetch is semi-prostrate, with trailing stems up to 3 ft. long. The leaflets are blunt and about 1/4 inch wide. The floral racemes have 6–12 pinkish-purple flowers. While similar in appearance to hairy vetch (*Vicia villosa*), 'Lana' vetch has finer hairs on its stem and foliage. Pods are tan in color and contain 4-6 round dark seeds. The cultivar matures earlier than other vetches and seed is persistent.

## Source

The original plant materials for 'Lana' woollypod vetch were collected growing under a spiny bush in an eroded and overgrazed landscape near Adana, Turkey in 1936. The seeds were brought to the California Plant Materials Center in Pleasanton the following year. Plantings at the Pleasanton PMC were started in 1946 initially comparing 30 annual legume species and concentrating on range sites. The performance of 'Lana' was outstanding and superior as a self-perpetuating annual legume. After its release in 1956 acceptance was rapid and by 1961 about 1/4 million acres included 'Lana' as a component in conservation plantings.

## Conservation Uses

'Lana' is recommended as a cover crop under a variety of cropping systems and soil types. Biomass of 8,000 lb dry matter/acre can be produced, which adds organic matter to soils and improves soil structure. 'Lana' is an excellent nitrogen source, and contributes between 100 – 300 lb N per acre with adequate moisture and good growing conditions. 'Lana' suppresses annual weeds due to vigorous growth in fall and spring and possible growth-limiting, allelopathic effects. In orchards and vineyards 'Lana' is used as an annual cover crop between the rows, managed to set seed and persist, although its persistence as a self-reseeding cover diminishes over time. In other cropping systems it may be used as green manure and living mulch, in these cases it should be turned under before it matures.

As forage 'Lana' produces seed in dry land conditions that would be unfavorable to other vetch species and increases biomass of other plants including grasses.

As wildlife habitat 'Lana' serves as forage, the seed is food for doves and the plant increases productivity of upland game habitat. 'Lana' is a great pollinator resource supporting populations of honeybees and native bees.

## Area of Adaptation and Use

The species has become naturalized in locales from Maine to Montana, south to Georgia, Missouri, and California.

'Lana' woollypod vetch grows best under cool wet conditions with 16 inches or more precipitation annually, although it can produce under significantly dryer conditions. It is recommended for elevations below 4000 feet. The legume tolerates many soil types, including poor and sandy soils.

## Establishment and Management for Conservation Plantings

Fall planting is recommended for 'Lana' woollypod vetch. Inoculate seeds with "pea/vetch" type rhizobia inoculant prior to planting, unless a nodulated crop of vetch has been grown in the field within the past few years. Seeding rates are 30–60 lbs. pure live seed per acre (broadcast), or 10–30 lbs. pure live seed per acre (drilled). Broadcast and disc lightly, or drill to a depth of 1/2–1 inch (1.25–2.5 cm). Drilling gives better results than broadcasting seed. 'Lana' is the earliest maturing vetch



'Lana' woollypod vetch (*Vicia villosa subsp. varia*) is a cultivar released in 1956 in cooperation with the California Agricultural Experiment Station, Lockeford Plant Materials Center.

commercially available. When used as a cover crop it should be turned under prior to setting seed unless persistence is desired. Mowing or high chopping may be needed in vineyards and orchards because of its twining growth habit as to prevent the growth into vines and trees.

If used as a component of forage, grazing should be timed so that enough seed has matured to ensure plants for the following year. 'Lana', like most vetches, is somewhat bitter yet palatable forage when green, and the palatability increases with dryness. If grazing occurs before seed matures then 'Lana' woollypod vetch will not persist and may need to be reseeded.

### **Ecological Considerations**

'Lana' vetch is susceptible to root knot nematode infection and it can be a host of *Sclerotinia minor*, a soil borne pathogen that causes a fungal disease affecting lettuce, basil, and cauliflower.

'Lana' woollypod vetch can become weedy due to its ability to quickly establish in disturbed sites and production of hard seeds. Although easy to control with herbicides, the seed can persist in soil for several years. The species is not listed as invasive in California.



*Vining habit, purple flowers and immature pods of 'Lana' woollypod vetch. Lockeford Plant Materials Center.*

### **Seed and Plant Production**

Planting rate for 'Lana' vetch is 5 pounds per acre with 5 foot row spacing. It is a prolific seed producer, but the pods shatter easily, which creates a harvesting problem. Good seed recovery can be obtained by raking the fields without mowing. If the stand is heavy, mow and then rake then combine with a belt-type pickup attachment once the plants are dried. Direct combining is possible where the crop has matured uniformly and weather conditions are favorable. Seed should be cleaned using a clipper-type cleaner with a No. 14 screen on top and No.8 bottom screen. Yields of 750 -950 lb/acre were obtained at the Pleasanton Plant Materials Center.

### **Availability**

*For conservation use:* 'Lana' vetch is available at many different seed companies in California, Oregon, and Washington in both small and large quantities.

*For seed or plant increase:* Foundation seed is maintained by the USDA-NRCS Plant Material Center in Lockeford, California and available to interested parties for increase purposes. Long-term preservation of seed is stored at the National Plant Germplasm System (NPGS).

### ***For more information, contact:***

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**<http://plant-materials.nrcs.usda.gov/capmc>**

### **Citation**

'Lana' vetch (*Vicia villosa* subsp. *varia*). USDA-Natural Resources Conservation Service, California Plant Materials Center. Lockeford, CA 95237. Published [September, 2012], Revised [December, 2017].

For additional information about this and other plants, please contact your local USDA Service Center, NRCS field office, or Conservation District <<http://www.nrcs.usda.gov/>>, and visit the PLANTS Web site <<http://plants.usda.gov/>> or the Plant Materials Program Web site <<http://www.plant-materials.nrcs.usda.gov/>>

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