

# LUPIN WILD SPECIES



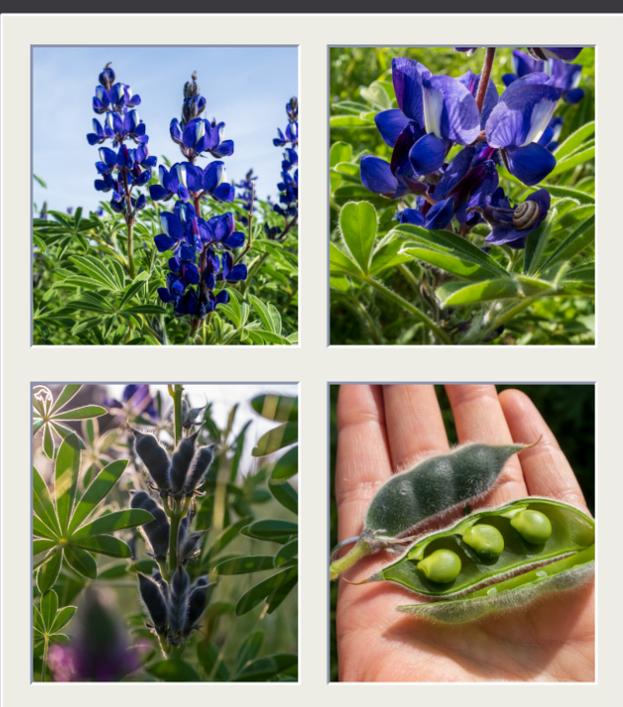
## Mediterranean region Israel

Four species of lupins are globally cultivated, and used in food markets – *Lupinus albus*, *L. angustifolius*, *L. luteus*, and *L. mutabilis*. Wild lupins have promising potential as novel crops. Nevertheless, the level of alkaloids does not currently allow a direct use of wild lupins as novel food without processing.

*Lupinus pilosus* and *L. palaestinus* are two lupin species, native to Israel. *L. pilosus* is found in scrublands in the Eastern side of the Mediterranean region (i.e., Israel, Lebanon, Turkey, Greece). *L. palaestinus* is endemic to Israel and found in sandy soils.

- The species bloom from February to May and bare fruits by early summer.
- The pods are typically with 3-6 seeds.
- Total alkaloid level exceeds the range of edible lupins before industrial processing.
- The pod is thick and turns from light green to light brown when ripe, and is covered with dense white hairs.
- Ripe seedpods dry, curl up, burst open and disperse their seeds out.

### *Lupinus pilosus*



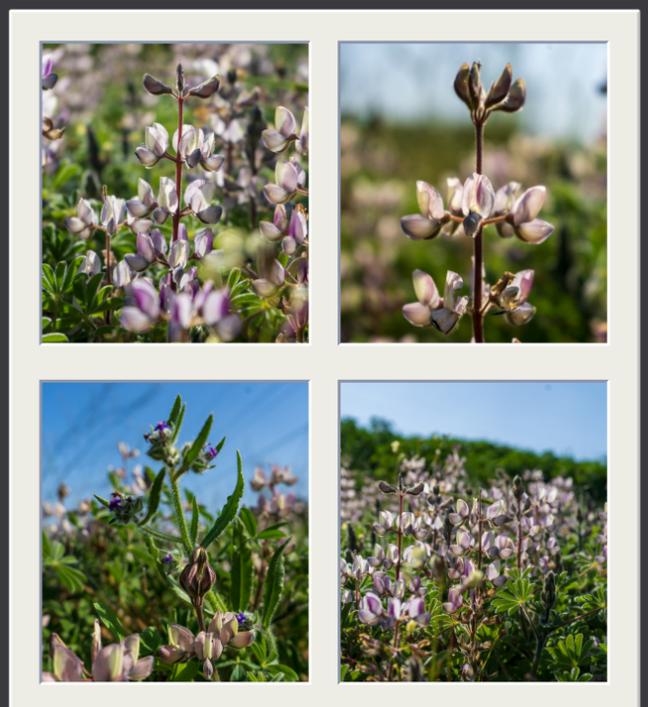
Commonly known as blue lupin. Usually appears in large clusters, and renown for its impressive carpet of flowers.

#### CHARACTERISTICS

- Large seeds, rich in proteins and other nutritious compounds;
- Tolerates a wide range of soil conditions – basalt and calcareous.



### *Lupinus palaestinus*



Commonly known as Palestine Lupin, the flowers are light blue, lilac, white.

#### CHARACTERISTICS

- Seeds smaller than blue lupins;
- Adapted to light sandy soils.

