SOLUTIONS
IN THE LAND

CROP PROFILE

LAVENDER

Lavandula
Perrenial herb
Member of mint family

History
Lavender is said to have originated in the Mediterranea, Middle East, and India. Its history goes back to ancient times. The Romans used lavender to scent their baths, beds, clothes, and even hair.

Climate Needs
Lavender requires full sun (6 or more hours per day). Without regular rainfall, young lavender propagules will need to be watered every four to five days during the first month in the field and especially during hot summers or in windy locations. Be sure to let the plant roots dry out between irrigations to prevent root rot diseases. English lavender can be left outside over winter.

Lavender Description
Lavender produces flowers on shoots or spikes ranging from lilac to blue in color. The leaves can be simple or pinnate. Prune your lavender plant once or twice yearly, always pruning after flowering. Leave the foliage over the winter to protect new growth from frosts. In spring aggresively cut back the plant to prevent them from becoming leggy and bare at the base. It's important not to cut back into old wood, as it won't regrow. If you prune lavender right before it goes into bloom, it will significantly delay the arrival of flowers.

Soil
Lavender is best established on sandy loam soils with a pH ranging from 6 to 8. Soil beds must be worked down 18 to 24 inches. Generally, lavender is planted 24 to 36 inches apart to allow for adequate airflow between plants. It is best to raise the bed about 6 inches above ground level, allowing for better drainage to avoid root rot.

Seeding
Lavender can be started from seed, but patience is required as germination can take many months. Planting of seedlings or cuttings should be done after the danger of frost has passed. Cuttings are placed in a mixture of 50/50 sandy soil and perlite and allowed to root, then planted directly into the field.

Fertility
Lavender needs little to no fertilizer. If soil health is poor, supplemental fertilization or adding compost is necessary in spring.

Risk
Lavender is a low risk plant, however inadequate pruning will be detrimental to the looks of this plant. Waterlogging and excessive moisture levels are another risk to be mindful of.

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Highlights

Lavender is a high-ranking sustainable plant because it does not rely on pesticides and fertilizers. Temperature, days of sunshine, rain, and the growing season all impact lavender's scent and yield. The flower buds contain the highest amount of concentration for essential oils. The best time to give your lavender plant a slightly harder prune is in the fall after the last bout of flowers fades.

Weed Control

Mulch and landscape fabric can help control weeds, applying a medium application of mulch around the base of the plants in the fall or spring months. Mulch applied too heavily can increase susceptibility to root rot.

Pest & Disease Managment

The spittle bug and aphids are pests of Lavender. This plant also can become infected with alfalfa mosaic virus which can be transmitted by aphids.

Harvest

The best time of day to harvest lavender is late morning or early afternoon when it is as dry as possible. That means you should never harvest after rain or even a heavy dew. You want to harvest as the first flower blooms begin to open up. Lavender is typically harvested in mid-June to late July in the upper midwest. Oil can be collected for up to a month after bloom. Most harvesting is done by hand, using pruning equipment.

Cleaning & Storage

After harvest, lavender is grouped into bunches and stems are bound with rubber bands. Bunches should be around 2 centimeters in diameter. These bunches are then hung upside down to dry. They should be kept in a dry, dark area with good ventilation to minimize the risk of mold growth, or can be dehydrated. After a few weeks, the flowers will have fully dried and can be shaken gently from the stems into a container. Store them in a lidded jar somewhere dark and cool.

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Rating any crop's production opportunity or risk is subjective and depends on the region where the crop is to be raised. Genetic advancement for pathogen tolerance and adverse weather condition has been more significant for popular, high seed sales crops such as corn and soybeans. The table below lists some of the issues of producing specific crops and helps guide your process of selecting your cropping choice.

Average rating: 3.42

Issue	1	2	3	4	5
Seed availability		X			
Scouting requirements				X	
Drought tolerance					X
Waterlogged soil tolerance	X				
Disease pressure				X	
Wildlife concerns					X
Yield swings				X	
Harvest ability					X
Field loss				X	
Market demand			X		
Soil regeneration		X			
Residue value		X			
Storability					X
Benefit for following crop		X			

1- very low   2- low   3- average   4- moderately high   5- very high

Seed availability – Price, lead time, and required lot size are considerations for these issues
Scouting requirements – What frequency does someone need to look at the crop?
Drought tolerance – Rainfall patterns are requiring crops go longer between rainfall events.
Waterlogged soil tolerance – Rainfall events tend to produce higher volumes than historical averages.
Disease pressure – Plant stress has increased with the rise of daytime temperatures
Wildlife concerns – Deer, rabbits, voles, resident geese, and others can destroy fragile crops.
Yield swings – How predictable will the income be when this crop goes to market?
Harvest ability – Do we need plans B & C if adverse conditions affect the harvest?
Field loss – How much will be left in the field and can we monetize field loss?
Market demand – Does this crop have an elastic delivery window and are there timing penalties?
Profitability – Is there potential for higher margins needed for a shrinking land base?
Soil regeneration – Does this crop support the next crop?
Residue value – What remains after the target crop? Can we monetize the residue?
Storability – How long can we hold this crop? Will quality be challenging to maintain?

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