YORKSHIRE GARDENS TRUST

September 2022

Recycle in your Garden

Dear Schools,

It is hard to believe that summer is at an end, and autumn is just round the corner! Just the right time to think about giving the soil in your allotment, vegetable garden or flower beds a real treat! To help you with this, we have sent you some **Blue Lupin seeds**.

The YGT's theme this year is **'Recycle in your Garden'**. The Blue Lupin seeds act as a green manure, which means that they can be planted, their flowers enjoyed and can then be dug into the ground to add vital nutrients to the soil.

We tend to think of soil as just 'dirt', but it is so much more! Soil is a living ecosystem—a large community of living organisms linked together. Every teaspoon of soil is home to billions of microorganisms—bacteria, fungi, nematodes, insects, and earthworms that all play important roles.

So, what are these roles?

- Bacteria and fungi break down dead plant and animal tissue, which becomes nutrients for plants.

- Nematodes (roundworms) eat plant material and other soil organisms, releasing plant nutrients in their waste.
- Insects shred and chew organic material (for example, leaves, stems of plants and moss) into smaller bits, which bacteria and fungi can easily access.
- Garden earthworms burrow and create pathways in soil that fill with air and water for plant roots.

A healthy soil ecosystem provides plants with easy access to air, water, and nutrients.

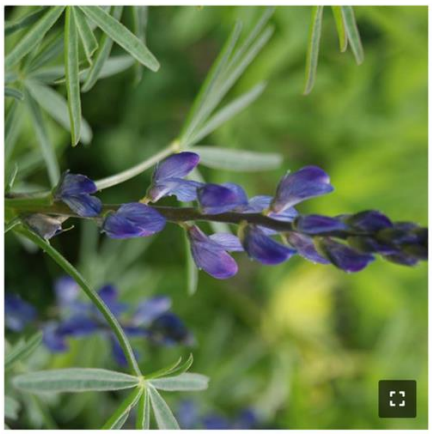
To create this special ecosystem, the soil needs to have nourishment. Just like we need to eat a healthy and balanced diet, soil also needs to be ‘fed’ with nutritious matter! This is where green manure can help out!

Manure has been used for centuries as a fertiliser for farming, as it is rich in nitrogen and other nutrients which facilitate the growth of healthy plants. Manure from pigs and cattle can be very smelly and rather unpleasant to dig into the ground! Fortunately, there are other ways we can fertilise the soil!

More Information about Green Manures

Green Manures are fast growing plants, which are sown to cover bare soil. Their foliage smothers weeds and their roots prevent soil erosion. When dug into the ground when still green, they return valuable nutrients to the soil.

Blue lupins belong to the family Legumiacea (or legumes) which include peas and beans. They develop nitrogen-fixing nodules on their roots, allowing them to 'fix' nitrogen from the air. Once the lupins are turned into the soil and begin to rot down, the nitrogen becomes part of the soil, and act as a natural fertiliser for plants and seeds subsequently planted.



Photograph, courtesy of RHS.

The soil should be left for about 4 weeks after turning in the green manure crop, to allow the foliage to break down and the nutrients to be absorbed into the soil. Incorporating the green manure crop into the soil by 'turning it in', also improves the structure of the soil by incorporating organic matter.
All green manures suppress weeds, improve the structure of the soil, and help reduce erosion. Reducing erosion means that the surface of soil is less likely to be washed or blown away in Winter storms.

How to Use Green Manures

- Sow seeds in rows, or scatter across the soil and rake them into the surface.
- Once the ground is needed to plant new crops or seeds, chop down the foliage of the blue lupins and leave it to wilt.
- Next, dig the plants and foliage into the top 25cm of soil.
- After digging in, the ground should be left for two weeks or more before sowing or planting any new crop of plants.

Healthy plants start with a healthy soil!
Happy planting!

More information about green manures can be found on the following websites:

https://www.rhs.org.uk/soil-composts-mulches/green-manures

https://www.chilternseeds.co.uk/item_826T_blue_lupin__lupinus_angustifolius