Garden number:

# Logbook

*Keeping track of your activity in the project*

On this logbook, you will keep track of your activities around the snow peas. This way, we can get a better idea of the possible effects of certain activities. In the table, you will write down what you've done with the plants, and below you will answer the following questions about the activities you've done in the area where you will sow the snow peas prior to the growing season of 2026:

Did you turn the soil before the growing season? yes / no

Did you fertilize the soil before the growing season? yes / no

If yes, what? _____

When? _____

How much? _____

Did you add anything else to the soil before the growing season? yes / no

If yes, what? _____

When? _____

How much? _____

Sowing date: _____

Date of germination: _____

Date of burying the underwear: _____

Date first flowers: _____

Date root nodule measurement: _____

Date first snow pea pods: _____

Date of digging up underwear: _____

If you are bringing snow pea pods to the Harvest Festival, harvest them at most three days before the festival and store them in the fridge. Below, write down the date at which you harvested the snow pea pods for the Harvest Festival.

Harvest date snow pea pods for Harvest Festival: _____

On the backside of this piece of paper, you will find a table in which you can write down activities you've done to the plants or the soil. This only applies to the part of your garden where you grow the snow peas.

| Garden number: | | |
|---|---|---|
| Date | What | How much |
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Garden number:

# Root nodule instructions

*Learn more about the link between soil and plant*

We need three plants for this measurement. Choose the outer two and middle plant of a row. If you have more than one row, then choose three plants that are not growing next to each other.

- Carefully dig up these three plants with a shovel. Try to dig around the root system as much as possible but also keep in mind the root systems of the neigbouring plants.
- Wash the roots carefully in a bucket of water. The root nodules can easily fall off so try to wash slowly and with care.
- Give an indication of overall plant growth and vigour, count the amount of root nodule clusters and write down the position of the nodule clusters in the table below.
- Cut open a few of the root nodules of each plant and assess the colour. If the nodules are pinkish/red inside, they are fixing nitrogen actively. Brown, white or green nodules are probably a bit older and no longer active. Write this down in the table below.
- For a more visual explanation of certain terms, check out figure 1 on the next page.

| | | | Your score | | |
|---|---|---|---|---|---|
| | | | Plant 1 | Plant 2 | Plant 3 |
| Growth and vigour | Plants are green and vigorous | 5 | | | |
| | Plants are green and relatively small | 3 | | | |
| | Plants are not so green | 2 | | | |
| | Plants are yellow and not vigorous | 1 | | | |
| Nodule amount and colour | More than five clusters of pinkish nodules | 5 | | | |
| | Three to five clusters of mostly pinkish nodules | 3 | | | |
| | Less than three clusters, or mostly whitish/greenish nodules | 1 | | | |
| | No nodules, or only whitish/greenish nodules | 0 | | | |
| Nodule position | Nodules can be found both around the original seed and further along in the root system | 3 | | | |
| | Nodules primarily found around the original seed | 2 | | | |
| | Nodules primarily found further along in the root system | 1 | | | |

Add up all the numbers per plant to come to a final score. Is this between 11 and 13? Then the root nodules of your garden are very successful. Between 7 and 10 is less successful but still present. Between 1 and 6 is not successful.

The original table and method can be found on the following website: https://manitobapulse.ca/2019/06/assessing-field-pea-nodulation/

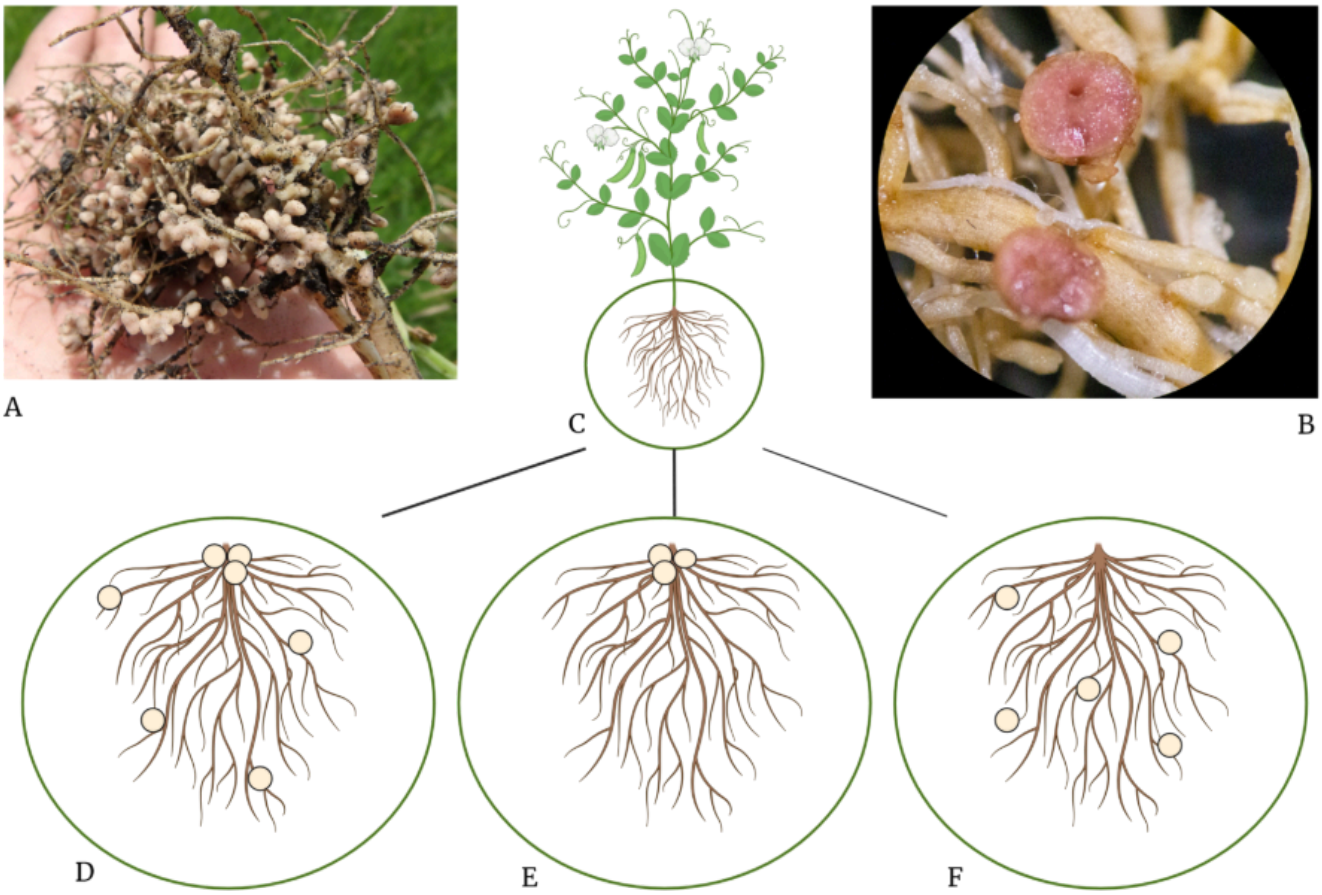


Figure 1:
(A) Example of root nodules on the roots of legumes
(source: https://manitobapulse.ca/2019/06/assessing-field-pea-nodulation/)
(B) Example of a section of a healthy root nodule underneath the microscope
(source: https://xitebio.ca/root-nodulation-what-you-need-to-know/)
(C) Schematic figure of a plant with snow pea pods
(D) Schematic example of root nodules both around the original seed and further along in the root system
(E) Schematic example of root nodules primarily around the original seed
(F) Schematic example of root nodules primarily further along in the root system