

## Soil inoculation to enhance the establishment of herb-rich grasslands

Herb-rich grasslands have been shown to positively impact biodiversity, both above- and belowground. In the current agricultural transition, farmers are becoming more and more interested in changing from single species (Perennial rye grasslands) to more biodiverse types of grassland. However, the lag time that occurs when transitioning towards a more ecologically intensified system, can withhold farmers from adapting these measures. Herb species are more difficult to maintain in fields and soil communities need time to build before measures will show (beneficial) effects due to legacy and niche effects, yet production losses are felt directly. Therefore, a farmer has to be patient, which is difficult as such a transition requires investments. To overcome this threshold, transitions in herb establishment and soil community could potentially be sped up by inoculating the field soil with an established soil community from a donor site. Introducing a layer of donor soil from a preferred community will potentially aid the establishment of herb species by providing symbiotic relations that would otherwise take years to develop.

To study the effect of inoculation within a controlled setting, a greenhouse experiment will be set up. You will combine different herb-rich grass mixtures with various soil inoculates. We are looking for an enthusiastic student that is willing to set up this experiment as his/her own, who is not afraid to think out of the box and is passionate about nature restoration efforts.

This experiment will be part of a larger project, making it possible to compare findings, which will strengthen the outcome of the project.

The work will include vegetation surveys, soil lab analysis, DNA extractions and field work.

Interested? Email [Rosa.boone@ru.nl](mailto:Rosa.boone@ru.nl) or [Robin.lexmond@ru.nl](mailto:Robin.lexmond@ru.nl)

