

# Role of weed hosts as pathogen reservoirs of insect vectored diseases (WEEDVECT)



#### Funding

Non-competitive funding mechanism. Each funder only pays for the participation of their own national researchers. Total funding € 163 000

## **Research consortium**

SASA (GB), AGES (AT), VATZUM (LT), NIB (SI),

## **Contact information**

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#### Goals

The project aims to develop a better understanding of '*Candidatus* Liberibacter solanacearum' (Lso), in terms of its crop hosts, vectors and native/weed hosts. Understanding of potential vectors and natural reservoirs may help to anticipate/prevent outbreaks in new areas and mitigate the impact on crops in existing areas

### **Objectives**

• Survey psyllid populations through suction traps and/or in field sampling to establish the presence or absence of known '*Candidatus* Liberibacter solanacearum' vector species

• Test psyllid populations for the presence of *Candidatus* Liberibacter solanacearum' to investigate the prevalence of the pathogen in the environment and also the possibility of new vector species

• Sample and test potential Apiaceae weed and crop hosts across carrot growing areas for the presence of '*Candidatus* Liberibacter solanacearum'

• Investigate the host plant range of psyllid species by barcoding their gut contents

• Investigate the prevalence of '*Candidatus* Liberibacter solanacearum' in the environment by developing a robust protocol for testing aphid species for the presence of '*Candidatus* Liberibacter solanacearum'

## Key outputs and results

• Inventory lists of potential Lso weed host species and Lso prevalence in the environment

• Inventory lists of potential Lso vector/carrier species and their distribution

• Validated method of linking plant host to psyllid/aphid species

Reliable method for Lso detection in non
psyllid insect species