



**Harper Adams  
University**



# Resistance and susceptibility in interactions between apple and woolly aphids

CINDAYNIAH GODFREY

# Woolly apple aphid background

- Colony-forming aphid
- Saliva induces gall formation
- Galls can form very quickly and block vascular tissue
- Stunted growth and reduced yield



# Project aims

- Determine the effects of feeding on different rootstocks on WAA growth and reproduction
- Refine genetic positions for 2 WAA resistance genes
  - Accurately identifying the genetic position of resistance genes will allow quick molecular screening
  - Reduces time taken to introduce new rootstocks
- Investigate WAA genetic diversity





# Results

- Growth & reproduction on resistant and 1 susceptible rootstocks, all used commercially
  - Reduced growth when feeding on resistant rootstocks
- Mixture of genetic structures observed in UK WAA populations



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- Sample collection

