

Selection of two subpopulations of *Biomphalaria glabrata* for their resistance and susceptibility to *Schistosoma mansoni*

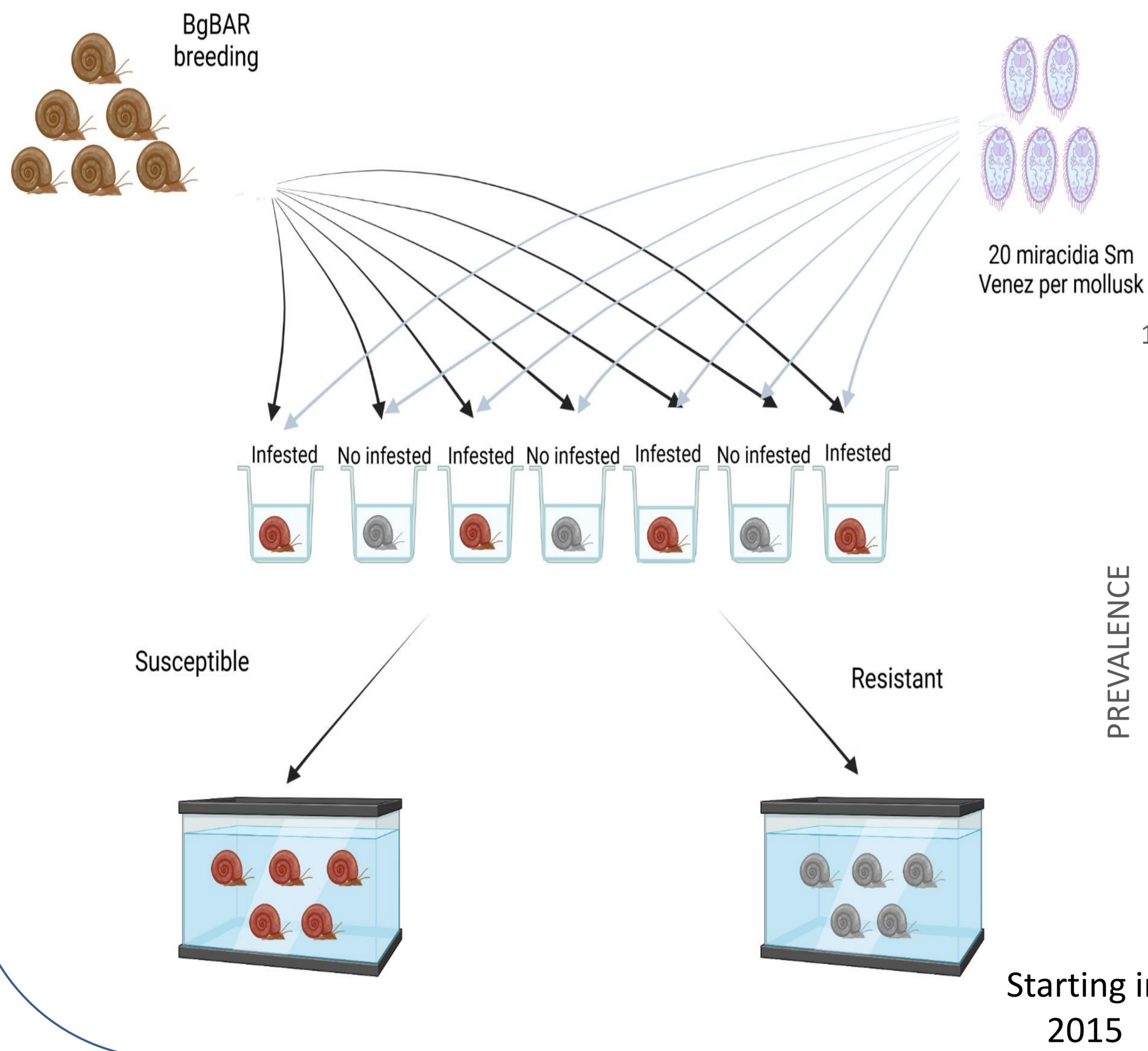


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Selection of resistants and susceptibles



- 5 generations were necessary to select stable phenotypes
- Resistant and susceptible phenotypes are stable in laboratory conditions without maintaining the selective pressure since 2019.
- Contrasted prevalence - susceptible snails 93% , resistant snails 6%.

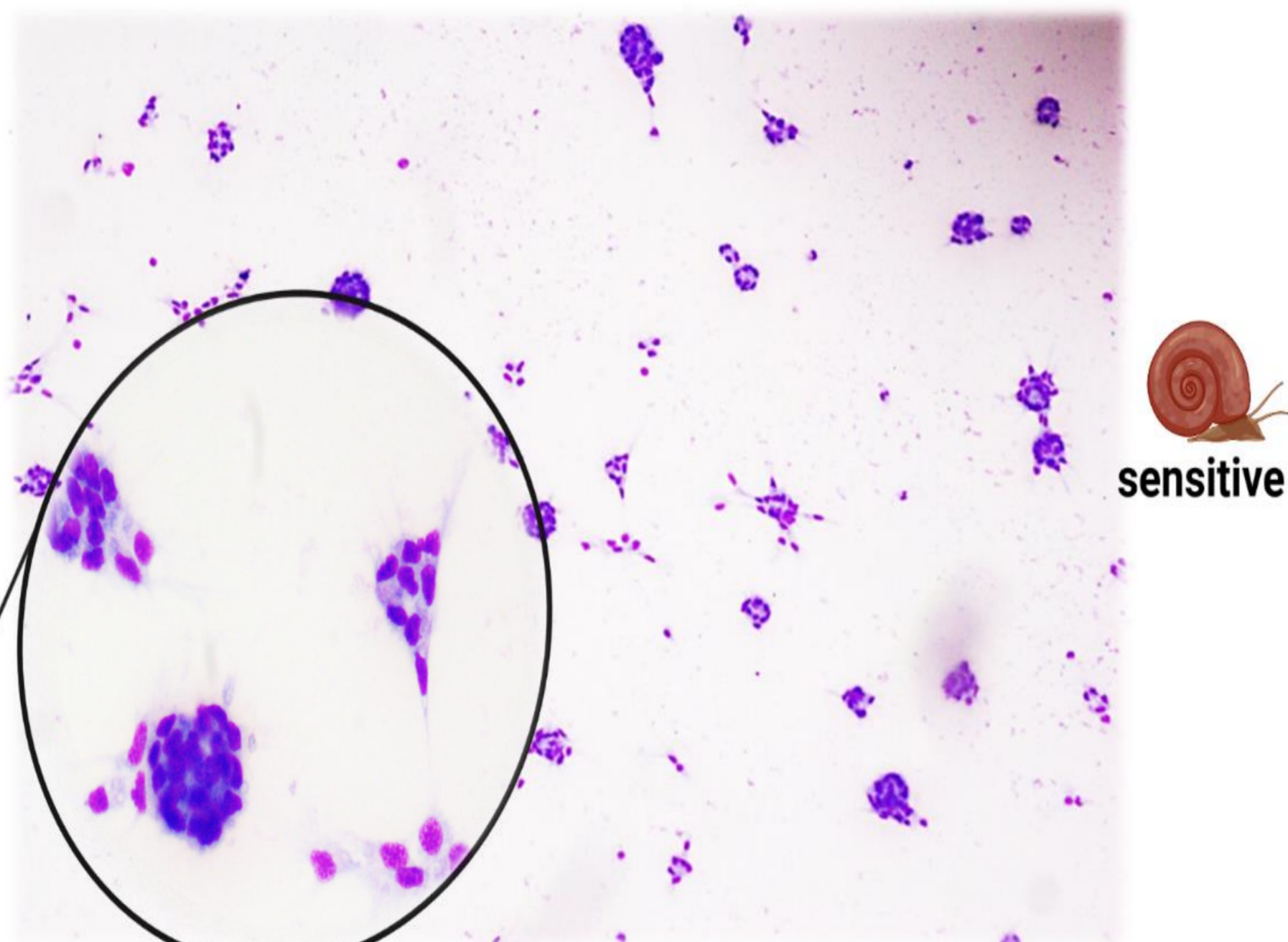
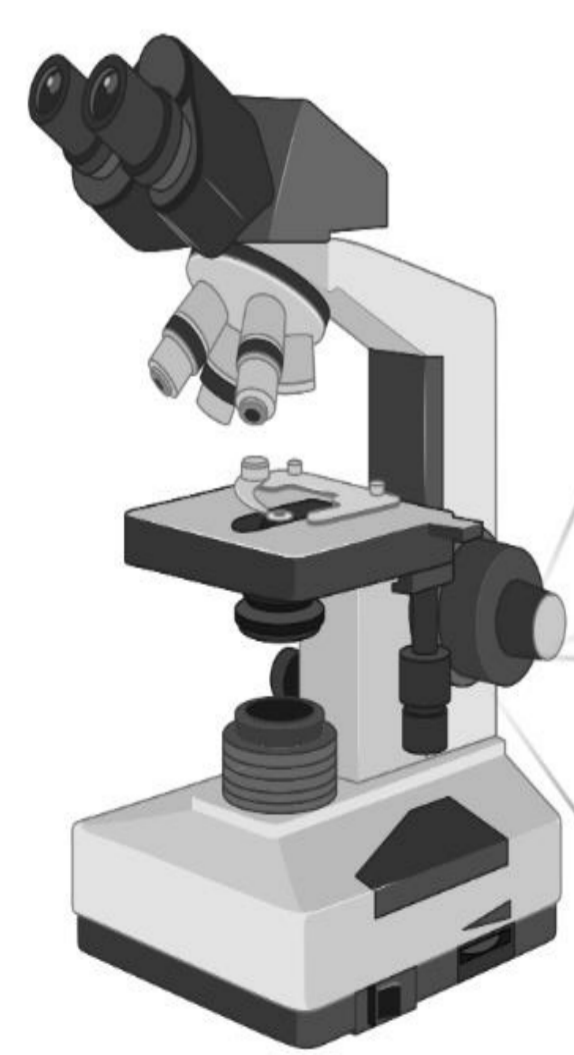
EVOLUTION OF PREVALENCE OVER THE SELECTION PROCESS



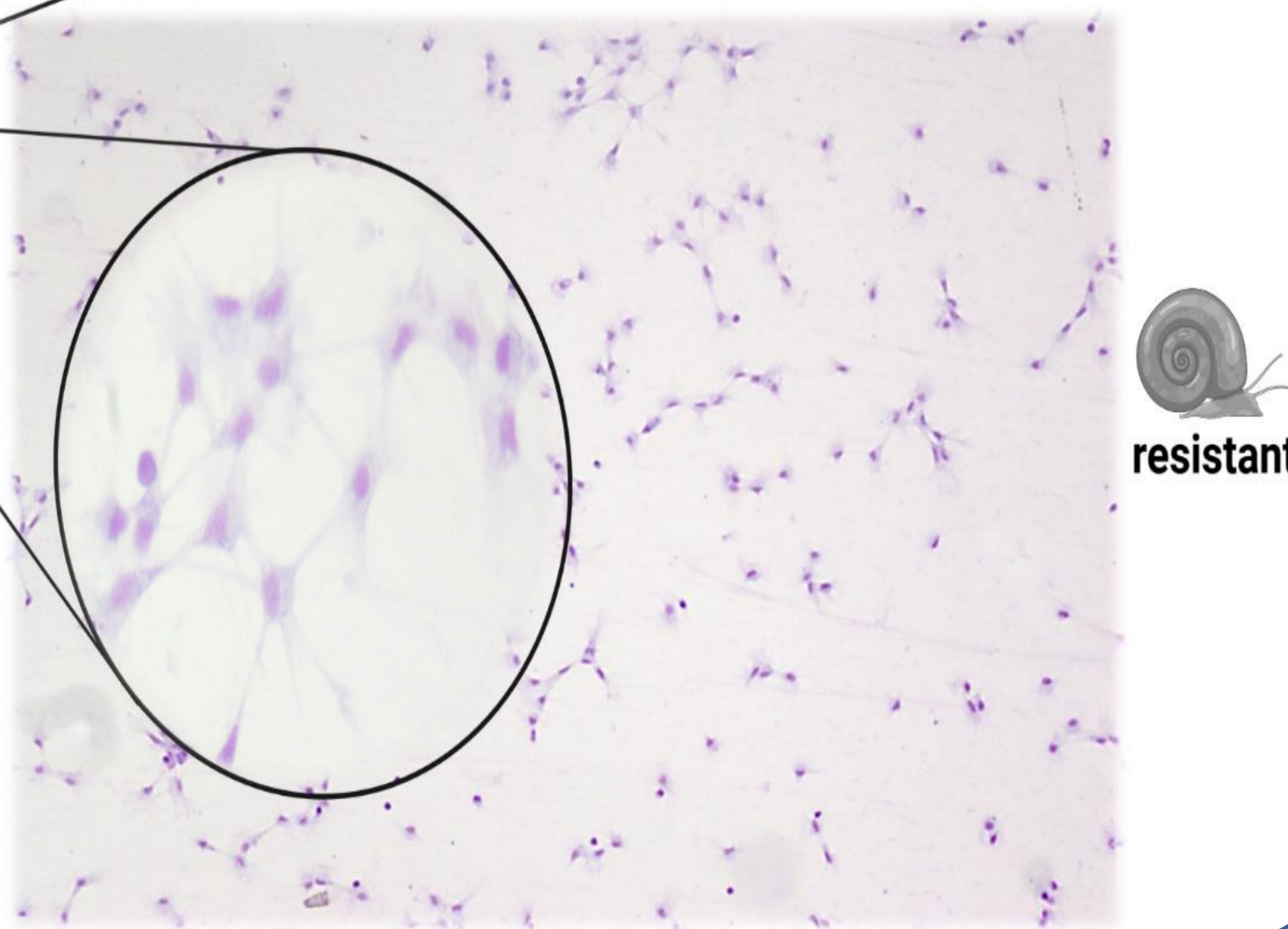
Microscopic observation

- Observation of different adhesion capacities between resistant and susceptible snail hemocytes

Aggregated hemocyte, roundly shaped

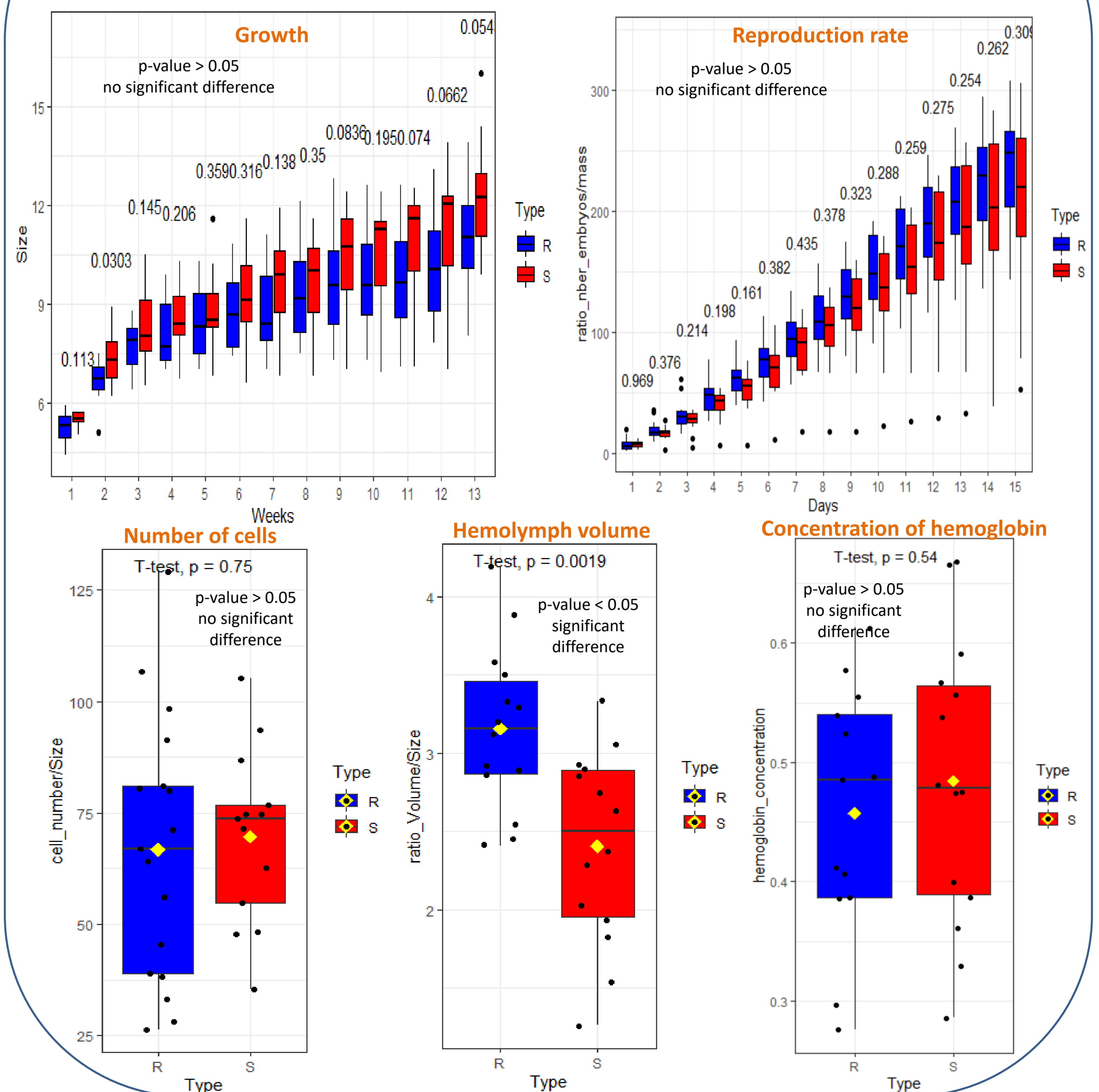


High adherence
Long pseudopodia



Life history traits

- No cost of resistance in selected resistant snails



➤ Conclusion : We develop comparative omic approaches on hemocyte cells in order to identify molecular keys to characterize the resistant phenotype

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