Rotations and Insecticide Resistance initial plots

Andy South and Ian Hastings 2018-01-19

Current state of play

- 1. Flexible number of insecticides between 1 & 5
- 2. Exposure can be set for each insecticide or same for all.
- 3. Starting frequency can be set for each insecticide or same for all.

Some example plots follow, these act as a visual test that the model is doing what we expect.

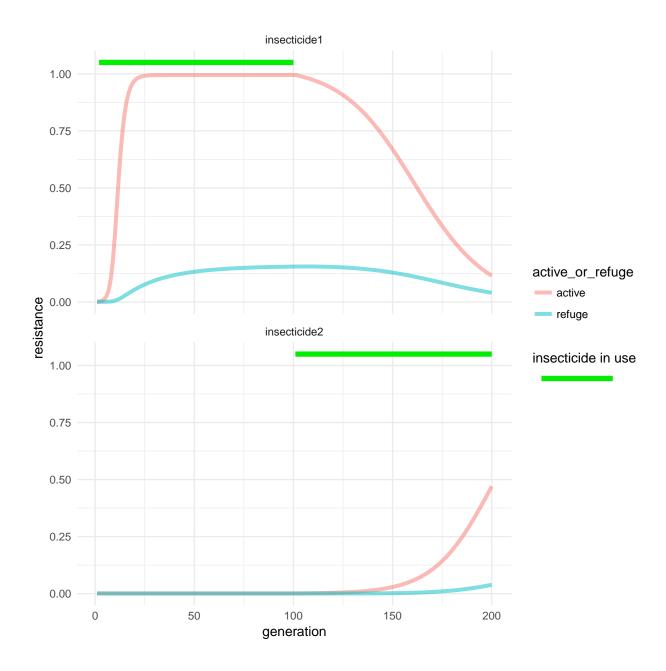


Figure 1: exposure set to 1 for r1 and 0.4 for r2

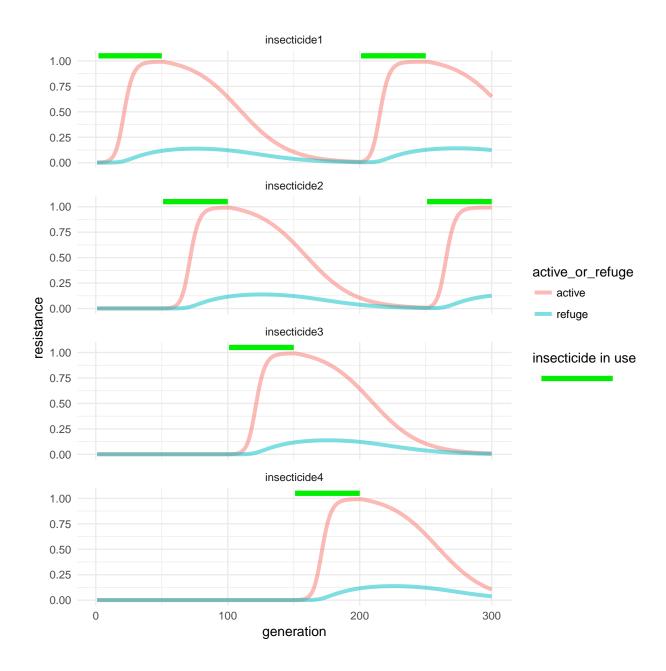


Figure 2: Rotation interval 50, migration 0.01

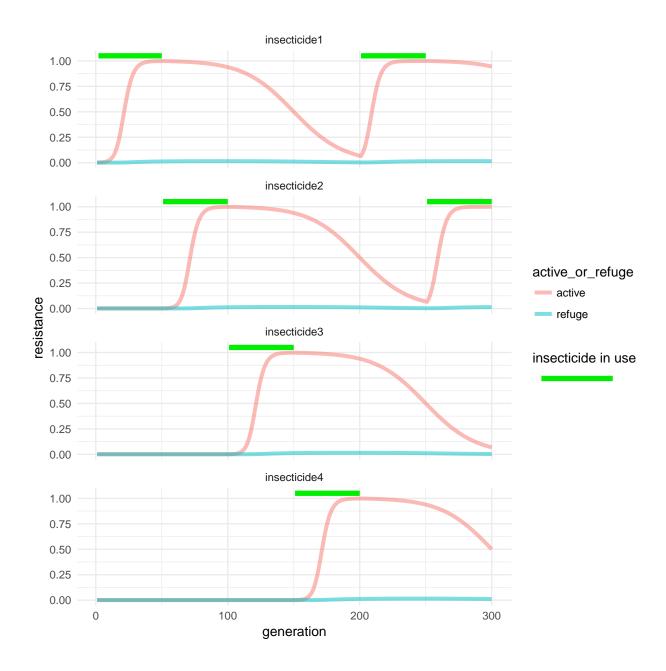


Figure 3: decrease migration to 0.001

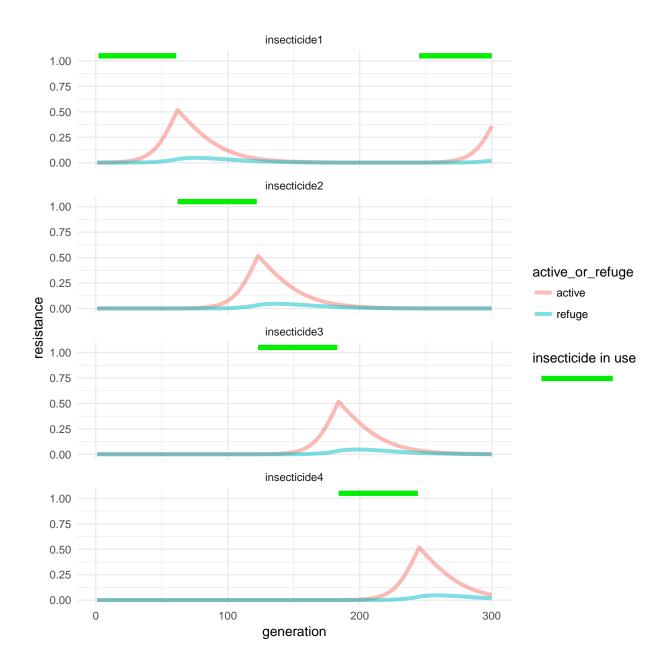


Figure 4: Rotate when resistant, exposure 0.5 migration 0.01

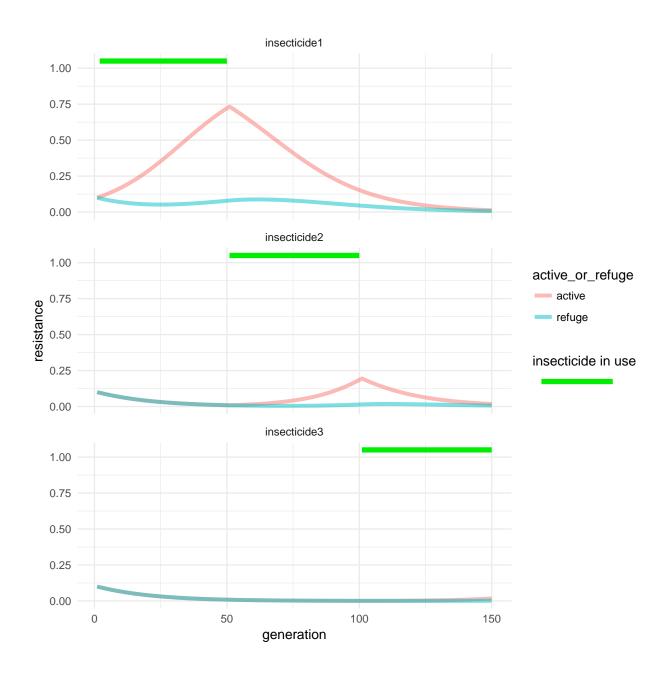


Figure 5: Showing how with cost (0.1) an initial decline in the freq of the later insecticides when they are not being used can lead them to behave differently than earlier ones.

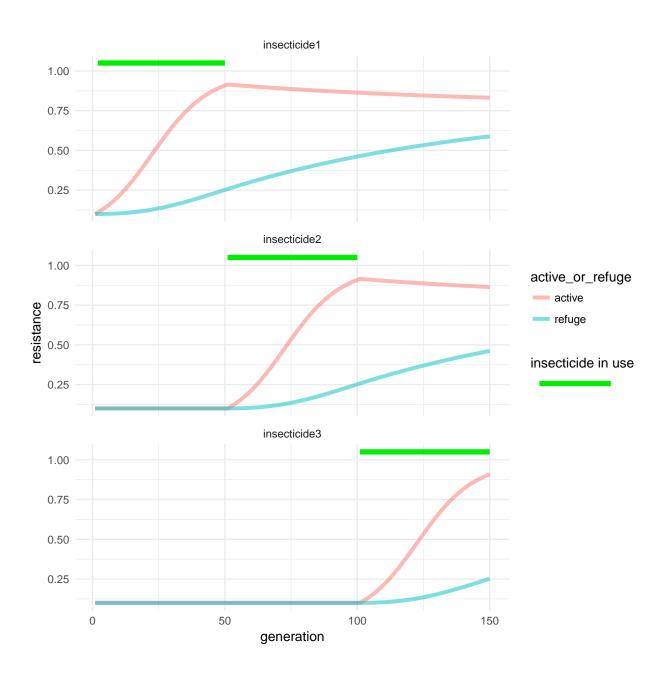


Figure 6: When cost is set to 0 all insecticides give the same curves.