sensi_an_rotations1. Start of sensitivity analysis for rotations.

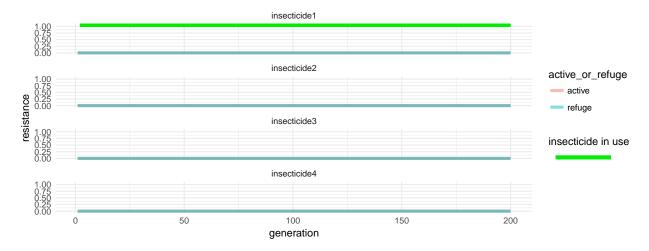
Andy South and Ian Hastings 2018-01-08

Starting question : is there any benefit to rotations when there are no costs and no migration to an untreated area ?

- Test 1. No refugia (i.e. Coverage=100%) or fitness costs. Would expect all policies to be equivalent.
- Test 2. Dominance of resistance and fitness costs both set to 0.5. I suspect one of the advantages of rotations (and the presence of refugia) is that they maintain lower resistance allele frequencies which slows the spread of recessive resistance alleles. I suspect/guess/intuit that if we make them semi-dominate these effects should disappear and all policies should be the same. I'm probably wrong but it's a nice test.....

Testing sensitivity analysis to answer question 1. Are sequences and rotations equivalent when coverage 100% and no fitness costs. On each page should see a run with 1 set of inputs first for sequence then for rotation.

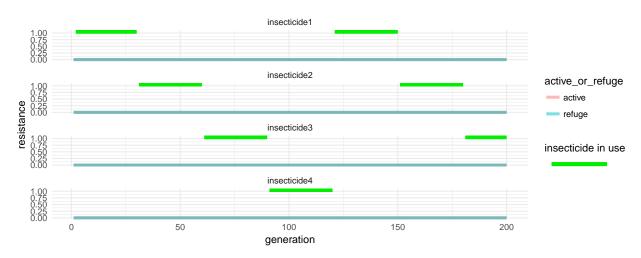
scenario 1 expo_hi 0.25724 eff 0.6198084 rot_interval 0



tot gens deployed under freq 0.5 = 199

##

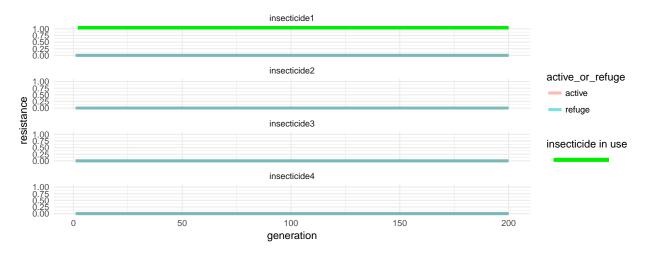
scenario 1 expo_hi 0.25724 eff 0.6198084 rot_interval 30



tot gens deployed under freq 0.5 = 199

##

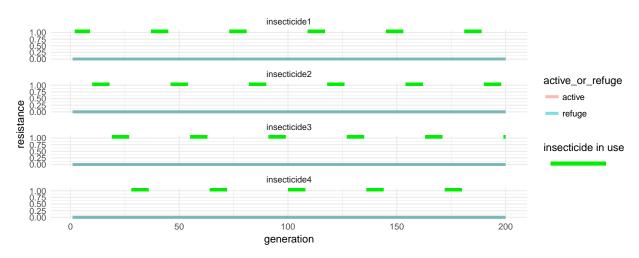
scenario 2 expo_hi 0.2117156 eff 0.6951954 rot_interval 0



tot gens deployed under freq 0.5 = 199

##

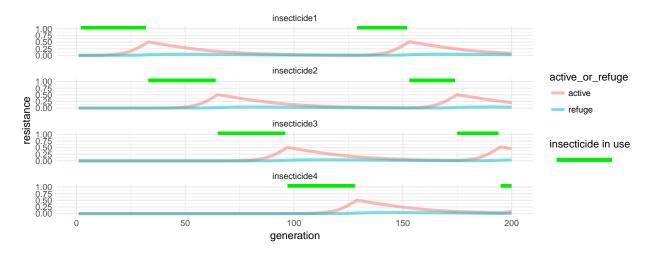
scenario 2 expo_hi 0.2117156 eff 0.6951954 rot_interval 9



tot gens deployed under freq 0.5 = 199

##

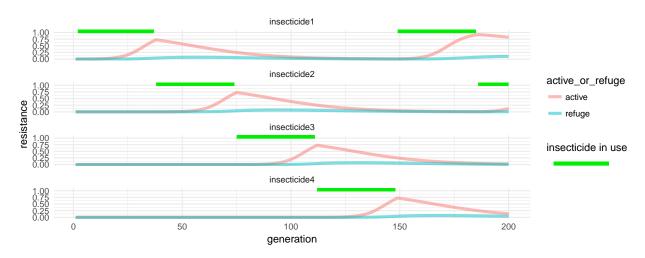
scenario 3 expo_hi 0.814833 eff 0.6366068 rot_interval 0



tot gens deployed under freq 0.5 = 199

##

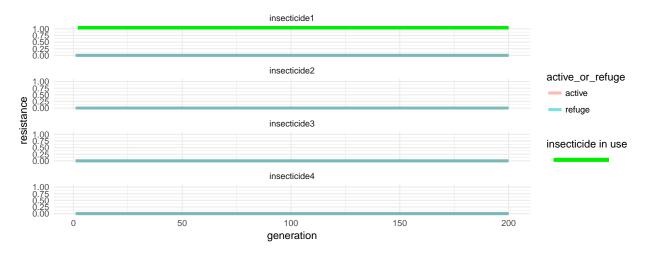
scenario 3 expo_hi 0.814833 eff 0.6366068 rot_interval 37



tot gens deployed under freq 0.5 = 166

##

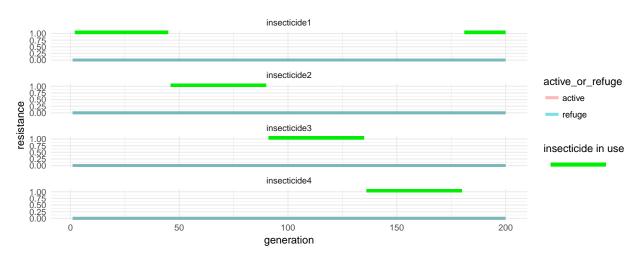
scenario 4 expo_hi 0.1962832 eff 0.751631 rot_interval 0



tot gens deployed under freq 0.5 = 199

##

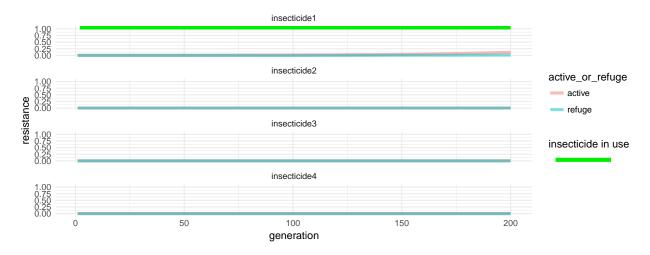
scenario 4 expo_hi 0.1962832 eff 0.751631 rot_interval 45



tot gens deployed under freq 0.5 = 199

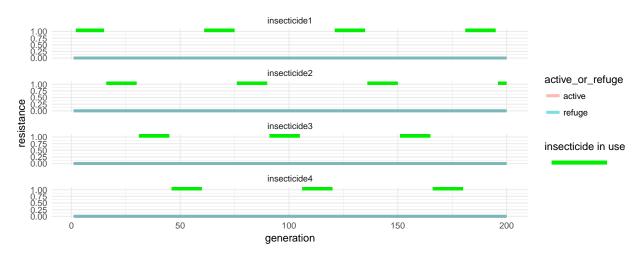
#

scenario 5 expo_hi 0.4240928 eff 0.4715368 rot_interval 0



tot gens deployed under freq 0.5 = 199

scenario 5 expo_hi 0.4240928 eff 0.4715368 rot_interval 15



tot gens deployed under freq 0.5 = 199