# **Parameter Exploration**

In the plots,

* **Pcontrol** refers to control where killing is random and not dependent on amount of food present at end of generation. This was the control used in previous manuscript and is not the best measure in my opinion. Death still happens on a lower individual level, which could provide some selection pressure for lower cue abundances.
* **Seasonal** refers to the non-control scenario where death is based on colony food stocks.

For models,

* **Control** for models refers to control model condition where the entry of an ant into a colony is a random coin toss, and thus not governed by tolerance curves.
* As discussed earlier, there was an inconsistency in our previous formulae as Gestalt used nest mean, but Uabsent and Dpresent used individual profiles. So I corrected these where the nest mean is used for all of them, however, I also had “Ind” versions of these where the individual profile is used, just for comparison.

## Model choice

For seasonal death, tick-based renewal of food (2 and 4 units). Default values of parameters.