Mutualism-Antagonism Synthesis Review

1. **Q1. Abstract ID (MA1, MA2 etc.)**

2. **Q2. Screener ID**
   Mark only one oval.
   - ◯ BC
   - ◯ CF
   - ◯ CM
   - ◯ ET
   - ◯ JK
   - ◯ JW
   - ◯ KJB
   - ◯ LKL
   - ◯ MW
   - ◯ NC
   - ◯ NL
   - ◯ NM
   - ◯ PT
   - ◯ RR
   - ◯ UE

3. **Q3. Study Type**
   Check all that apply.
   - ☐ Observational
   - ☐ Experimental
   - ☐ Modelling/theory
   - ☐ Review
   - ☐ Other:

Part 2- Characteristics of the Interaction

Note: If a question is not relevant to your paper, please enter 'NA'

4. **Q4. Interaction type**
   Check all that apply.
   - ☐ Host-symbiont
   - ☐ Male-female
   - ☐ Competition-cooperation
   - ☐ Consumer-resource/predator-prey
   - ☐ Other:

5. **Q5. Ecological scale of the interaction**
   Check all that apply.
   - ☐ Inter-specific (2 species)
   - ☐ Inter-specific (>2 species)
   - ☐ Intra-specific (within population)
   - ☐ Intra-specific (between populations)
   - ☐ Other:

6. **Q6. Interacting species, scientific name(s)**

7. **Q7. What trait influences the quality of the interaction? (e.g. behavioural phenotype)**

8. **Q8. In which species does the trait vary?**

9. **Q9. Is anything know about the genetic basis or heritability of the trait? (focusing on information provided by the paper only)**

10. **Q10. Does the study show a shift in the interaction between mutualism-antagonism?**

11. **Q11. In what scale does the interaction shift between mutualistic and antagonistic (e.g. does the trait variation lead to individuals, populations or species varying along this continuum)**
    Check all that apply.
    - ☐ Individuals
    - ☐ Populations
    - ☐ Species
    - ☐ Other:

12. **Q12. What is the direction of shift?**
    Check all that apply.
    - ☐ Mutualistic to antagonistic
    - ☐ Antagonistic to mutualistic
    - ☐ Other:

13. **Q13. What factors are driving that shift? (e.g. ecological, abiotic, social)**

14. **Q14. What is the ecological impact of the interaction and shift of that interaction? (i.e. what ecological processes may be effected, focusing on information provided by the paper)**

Part 3- Significance of paper for our review

Note: If a question is not relevant to your paper, please enter 'NA'

15. **Q15. Is there a connection to the NC3? (e.g. the promotion and maintenance on individual trait or niche variation)**

16. **Q16. Do you have any outstanding concerns or questions about the paper (e.g. is there no clear trait that appears to vary, is there no clear shift in the interaction between mutualism and antagonism)**

17. **Q17. Additional notes (include any points of significance that are not included in this questionnaire)**

18. **Q18. Do you think this paper can be included within the review (on the basis of our inclusion/exclusion criteria)?**
    Mark only one oval.
    - ◯ Yes
    - ◯ No
    - ◯ Maybe

19. **Q19. If No/Maybe, why?**
    Check all that apply.
    - ☐ There is no evidence of trait variation
    - ☐ There is no shift in the quality of the interaction
    - ☐ The trait varies between species, not within-species
    - ☐ Humans as a study subject (note: this is currently being treated as an exclusion criteria)
    - ☐ Full-text not accessible/not in English
    - ☐ Other: