**Supplementary Appendix:**

*Evolutionary Stable Strategy for Seed-Flower trade-off*

To determine whether the proposed seed-flower resource allocation trade-off is evolutionary stable, we separately explored the selective forces using an ESS analysis (Maynard Smith 1976). In particular, we examined whether a resident genotype (S\*) could be invaded by a rare mutant allele coding for increased resource allocation to seed production over floral structures (attraction and ovules) (S). The fitness of the mutant allele is assumed to be proportional to its frequency in the next generation, which depends on the probability of resident pollen fertilizing a mutant flower (*W*m\*f), mutant pollen fertilizing a resident flower (*W*mf\*), and mutant pollen fertilizing a mutant flower (*W*mf):

 (6a)

 (6b)

 (6c)

Where *p* is the frequency of the resident allele in the population and *q* is the frequency of the mutant allele. Pollen removal is dependent on the relative attractiveness of the genotype of the pollen donor to the alternative genotype, and pollen deposition and fertilization is dependent on the relative attractiveness of the pollen recipient, and the resources allocated to both ovule (1-*S*) and seed (*S*) production. Thus, the frequency of the mutant allele in the next generation is estimated as:

 (7)

By definition, if the resident population is employing an evolutionary stable strategy then it should not be able to be invaded by the mutant allele (i.e. the mutant will not increase in frequency in the next generation). For this to happen, equation (7) must satisfy the following conditions: and .

The ESS analysis indicated that increased resource allocation to floral characters such as ovules and attractive structures (petals and sepals) over seed maturation is indeed a stable state in the population, with the expression satisfied indicating that fitness is maximized when the mutant variant has a resource allocation similar to the resident population. The optimal *S* is found to be ~0.35 or the optimal floral allocation, 1-S≈0.65.