This is a study of the oviposition of a butterfly whose larvae require two resources for successful development: plant seeds and ant nests. This study looks at how oviposition by butterflies is influenced by the phenology of bud development and the occurrence of appropriate ants in the vicinity. This manuscript attempts to put the observations of egg distribution into a broader context of resource use. The observations were made in one summer. The results show that shoots surrounded by high quality plants receive fewer eggs likely because ovipositing butterflies can easily spread their eggs around and don't keep coming back to the same plant. Over all the probability of a stem receiving eggs is low particularly in plant patches. Although the paper mentions selection and fitness this really isn't measured.

Li 16 This first sentence is too complicated and in my opinion doesn't introduce what the study is about.
Li 19 Why sequential? I think it would be good to describe the system more clearly first. And then why this is relevant. What are the resource organisms in this situation?
Li 30 I find this sentence to be vague. This study doesn't really measure selection as reduced seed production does not necessarily reflect reproductive success of the individual.
Li 38-40 What is the evidence for this statement? Isn't it always influenced by oviposition choice?
Li 72 So the ants don't get anything from the caterpillars but what are they getting from the plants? Do the ants collect the seeds of the plants? I think the species interactions could be better described here. What is the cost to the ants of having the caterpillars in the nest? What is the distribution of the ants as related to the distribution of *Gentiana pneumonanthe?* Obviously not strong enough to cause them to avoid patches of the plant.

In both the abstract and the introduction I feel it would be better to start by outlining the challenges for this butterfly to make oviposition choices because two resources are required for larval success – seeds and ants. Then you could develop the resource concentration and dilution hypotheses as related to this system and how this tests the applicability of either hypothesis to this rather unique system. Really it seems to me that this is a study specific to this species and its behaviour and the attempt to put it into a broader perspective at the beginning doesn't work.

Li 138 How long are plants in these different development stages? Are measurements influenced by when measurements were done?
Li 142 How long does each stage last?
Li 163 How is ant abundance affected by time of day and weather conditions. How were these controlled for? What is the relationship between ants on the ground and those on plants? What are ants foraging for? Why are they on the plants.
Li 217 Would this mean that the bud would have been around longer and thus have a higher probability of more eggs?
Li 222 Are ants looking for nectar and thus attracted to later bud stages? How well do the counts of ants on the ground reflect ants on plants?

Li 227 Thus resource dilution hypothesis?
Li 244 What determines the distribution of the ants? I assume there are particular conditions that are good for nesting. Is this related to plant distributions? What resources do they require? Are they modifying the quality of the flowers in some way by their activity?
Li 266 How is the quality of neighboring plants evaluated by the butterflies. Are they initially attracted to patches of host plants where the cost of movement among plants is low?
Li 274 Does this often occur or is there similarity in phenology of flowering within patches?
Li 304 What do you mean by selection here. Yes the butterflies oviposit ore often on plants that flower early but does that change the frequency of early flowering over time or is the environmental variation sufficient to buffer directional selection?

Li 318 many species names are not italicized in references
Li 425 fix citation pages.

Table 1 Estimate is vague. Not of having at least one egg or number of eggs.

Figure 1 unoccupied by plants or insects in caption?

Figure 2 seems to show probability of having eggs being 0 up to shoot phenology 4 but figure B shows eggs at shoot phenology one.