

Leah

On page 5 it talks about analyses of covariance. How does this differ from analysis of variance?

Emily

I'm confused about how to read the statistics stated in the discussion section of this paper. For example, the paper states that 55% to 61% of the average proportion of variance in target performance is explained by neighbor density and biomass. It then goes on to say that this indicates strong competitive interactions (p. 1025). How are these numbers indicative of competition?

Joo Hyun

I had a hard time understanding the analysis section in Materials and Methods and I would especially like to know how the stat. test - analyses of covariance work.

JP

The M+M specifies 343 flats with 9 plants each. Am I correct in saying that the experimenters de-soiled 3087 plants? Is there a better way to de-soil the plants that we didn't employ?

Max

On page 1025 and earlier on in the article, they talk about how a negative correlation between neighbour species and mean response to density as a target species means that species are "good-effect competitors as neighbours (steeper slopes) [and] are also good-response competitors as targets (shallower slopes), whilst a positive correlation indicates a trade-off between the two types of competitive ability. If a plant has a steeper slope, does that mean it is both a good-effect competitor as neighbours AND a good-response competitor as a target? How does having a positive correlation mean you have a trade-off between the two types of competitive ability.

Kevin

This study focuses on the short term. Although the authors briefly address possible long term effects, how might the phenotypic traits discussed in the article relate to ecological succession and how would that vary across the species looked at?

Hannah

On page 1028 the paper talks about the difference between size-symmetrical and size-asymmetrical responses, and how the results support size-asymmetry. I was wondering if

we could talk more about this and clarify what exactly size-symmetrical and size-asymmetrical responses are.

Matt

Goldberg and Landa conclude that the competitive interactions between plants in their short-term study most resemble the interactions associated with size-asymmetry (1028). However, they note that "As a plant develops, differences in size between individuals or between species often becomes accentuated" (1028). If this is true, and Goldberg and Landa were to extend the study, isn't it true that they would be unlikely to observe size-symmetrical interactions at any point? This suggests to me that there is no point in a herbaceous field or pasture plant's life cycle where resource pre-emption gives it a competitive advantage. Is this true? If not, what in what circumstances would size-symmetrical interactions arise?

Kerry

How does shifting energy allocation from leaves and roots to support, storage and reproductive tissues result in a decline in competition?

Kevin

Why is it that plants with slower RGR from date of sowing would be better response competitors than plants with slower RGR from date of emergence? Does this mean that these plants are more developed in some way before emerging?