

A conceptual framework for studying the strength of plant-animal mutualistic interactions

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© 2015 John Wiley & Sons Ltd/CNRS. The strength of species interactions influences strongly the structure and dynamics of ecological systems. Thus, quantifying such strength is crucial to understand how species interactions shape communities and ecosystems. Although the concepts and measurement of interaction strength in food webs have received much attention, there has been comparatively little progress in the context of mutualism. We propose a conceptual scheme for studying the strength of plant-animal mutualistic interactions. We first review the interaction strength concepts developed for food webs, and explore how these concepts have been applied to mutualistic interactions. We then outline and explain a conceptual framework for defining ecological effects in plant-animal mutualisms. We give recommendations for measuring interaction strength from data collected in field studies based on a proposed approach for the assessment of interaction strength in plant-animal mutualisms. This