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## **069.02 - Identification of key plants for the restoration of degraded neotropical habitats based on network analysis of plant-frugivore interactions**

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Ecological restoration of natural habitats is expected to take into account not only the original species composition of a given site, but also the ecological functions and interactions performed by these species. Network analyses of complex interactions have been found to provide insightful information to interpret community structure and the contributions of species in structuring these communities. Here, we investigated 17 neotropical fruit-frugivore systems, distributed over 12 distinct ecoregions, in order to identify plant species responsible for supporting a wide array of fruit-eating birds and mammals and to substantially increase the interactions between all species. Using network analyses, we compared species centrality indices and vertices universal roles as a method to detect key plant species in those 17 networks of fruit-frugivore interactions. We found that vertices universal roles were more effective in determining key plant species. Even though more basic information on fruit-frugivore interactions is needed in order to produce robust listings of key neotropical plant species, network analyses proved to be a useful tool to assist in ecological restoration plans.