



Fig. 2 Depiction of mechanisms of soil community feedback. Here we illustrate fitness relationships that will generate positive and negative feedback on plant growth through changes in the community composition of soil mutualists or pathogens. The arrows and circles indicate the direction of beneficial and detrimental effects, respectively, with the relative strength of these effects being indicated by the thickness of the lines. Positive feedback can result from strongly host-specific soil mutualists and negative feedback can result from strongly host-specific pathogens (as illustrated with the upper left and lower right diagrams). Alternatively, asymmetric fitness relationships within a mutualism could generate negative feedback (upper right figure) and asymmetric fitness relationships between plants and soil pathogens could similarly generate positive feedback (lower right). This latter case could result, for example, if plant A had a high tolerance to pathogen Y (and therefore pathogen Y reaches high abundance with plant A) while pathogen Y has strong negative effects on plant B. As a result, the high initial abundance of plant A results in increased abundance of pathogen Y, which thereafter suppresses plant B.