



**Figure 1.** Alternative models of plant size distributions based on the balance between growth and mortality, based on demographic equilibrium theory (DET, blue) and metabolic scaling theory (MST, red). A. Both theories assume that growth rate increases allometrically with plant size, but B. they make different assumptions about the scaling of mortality. C. These alternative assumptions yield the Pareto distribution for MST versus a Weibull distribution for DET.