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**Trait diversity promotes to stabilize community dynamics**

The dynamics of marine communities are generally modeled through the McKendrick-von Foerster equations describing the biomass flow along the size spectrum. This modeling disregards the distribution of individual growth rate among different species due to the ignorance of species identities. The potential consequence is that predictions from this model might deviate from the reality by either being overestimated or underestimated. Using the novel size- and trait-based species model where the distribution of individual growth rate is explicitly included, the community size spectrum can be represented as an output of the total species size spectra. A significant stabilizing mechanism is recognized for the first time. It is demonstrated that the distributed individual growth rate tends to smoothen out the fluctuations in the resulting community spectrum and thus individual experiences less variable prey and predator fields. Effectively, trophic waves are smoothed out due to different growth rates among the individuals at a given point in the wave. The finding infers that the traditional community modeling is to some extent oversimplified.