



Modelling energy allocation strategies between growth and reproduction under different temperature conditions

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Abstract:

Growth rate and reproductive productivity vary amongst individuals even within the same species. Individual differences shape their life history effectively by coping with the environmental conditions in which they reside, such as temperature. This talk introduces allometric differential equations that describe an internal energy allocation mechanism between two processes: body growth and reproduction, under different temperature conditions.

Keywords:

allometric scaling; energy-based growth model; gradient matching