Positive Stationary Solutions and Spreading Speeds of KPP Equations in Locally Spatially Inhomogeneous Media.

This paper mainly explores spatial spread and front propagation dynamics of KPP evolution equations with random or nonlocal or discrete dispersal in unbounded inhomogeneous and random media and reveals such an important biological scenario: the localized spatial in-homogeneity of the media does not prevent the population to persist and to spread, moreover, it neither slows down nor speeds up the spatial spread of the population. (Received September 24, 2012)