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SPATIAL MODELLING OF THE DISPERSION AND HOST FINDING BEHAVIOUR OF CUSCUTA CAMPESTRIS

Cuscuta species are fast growing plant parasites of different communities. Their role in the maintenance of equilibrium states of the communities is partly still undiscovered. Under warmer climate conditions, some of them are treated as dangerous pests, since they can cause great losses in agricultural sites. On the other hand, in countries like Scandinavia they are protected species, since their growth is inhibited by the cold weather. Moreover, these plants have a special strategy to find their host, it is called foraging. In addition to land study we investigate their behaviour by using mathematical models. Planar, spatially explicit models may be one of the appropriate tools, but some other types of modelling techniques are also being considered. Computer simulations with *Mathematica* on these models will certainly give a lot of information on cuscuta species. In the talk we give an overview on the behaviour and known results of cuscutas. Then, we present the possible issues and the first results of our research.