

Table S1: Parameters of the Genetic Algorithm

Mathworks Function	Settings Floret Generator	Settings Galton-Watson
PopulationSize	60	60
EliteCount	$0.1 * (\text{PopulationSize})$	$0.1 * (\text{PopulationSize})$
CreationFcn	Uniform	Feasible population
SelectionFcn	Stochastic uniform	Stochastic uniform
CrossoverFcn	Scattered	Intermediate
MutationFcn	Gaussian	Adaptive Feasible

Parameters of the Genetic Algorithm employed for the optimization of the floret-generator. All other parameters are set to default values of the Genetic Algorithm from MATLAB's Global Optimization Toolbox. PopulationSize: The number of solutions (also called 'individuals') in each generation. EliteCount: The fraction of the top-solutions passed on to the next generation. CreationFcn: The function creating the initial population for the Genetic Algorithm. SelectionFcn: The function which determines how the Genetic Algorithm chooses 'parents' for the next generation. 'Parents' are two solutions from which a new solution is generated. CrossoverFcn: The function specifies how the Genetic Algorithm combines two solutions to form a new solution for the next generation. MutationFcn: The function specifies how the Genetic Algorithm makes small random changes a solution in the population to create a new solution for the next generation.