Electronic Supplement for the paper

Division of labour and colony efficiency in social insects: effects of interactions between genetic architecture, colony kin structure and rate of perturbations
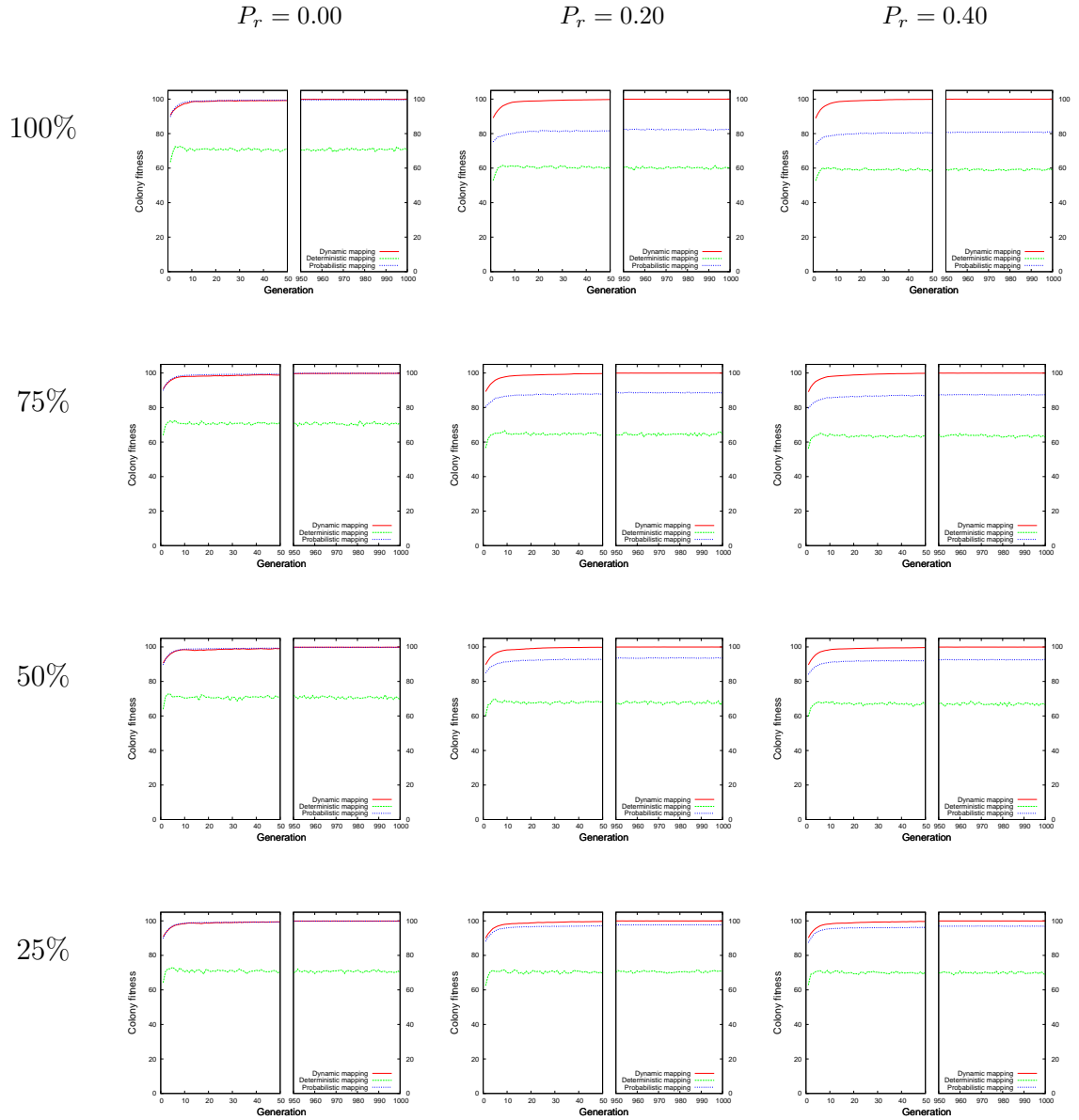
Figure 1: Effect of the proportion of individuals reallocated (100%, 75%, 50% and 25%) on mean colony fitness. Mean fitness values (10 runs) are given for the first 50 and last 50 generations in colonies with 100 individuals for three different reallocation probabilities P_r and each of three genetic architectures (dynamic: red solid line, deterministic: green dashed line and probabilistic: blue dotted line). When a lower proportion of individuals is reallocated to a new task, differences between the three genetic architectures decrease but always remain highly significant (all $P < 0.001$).
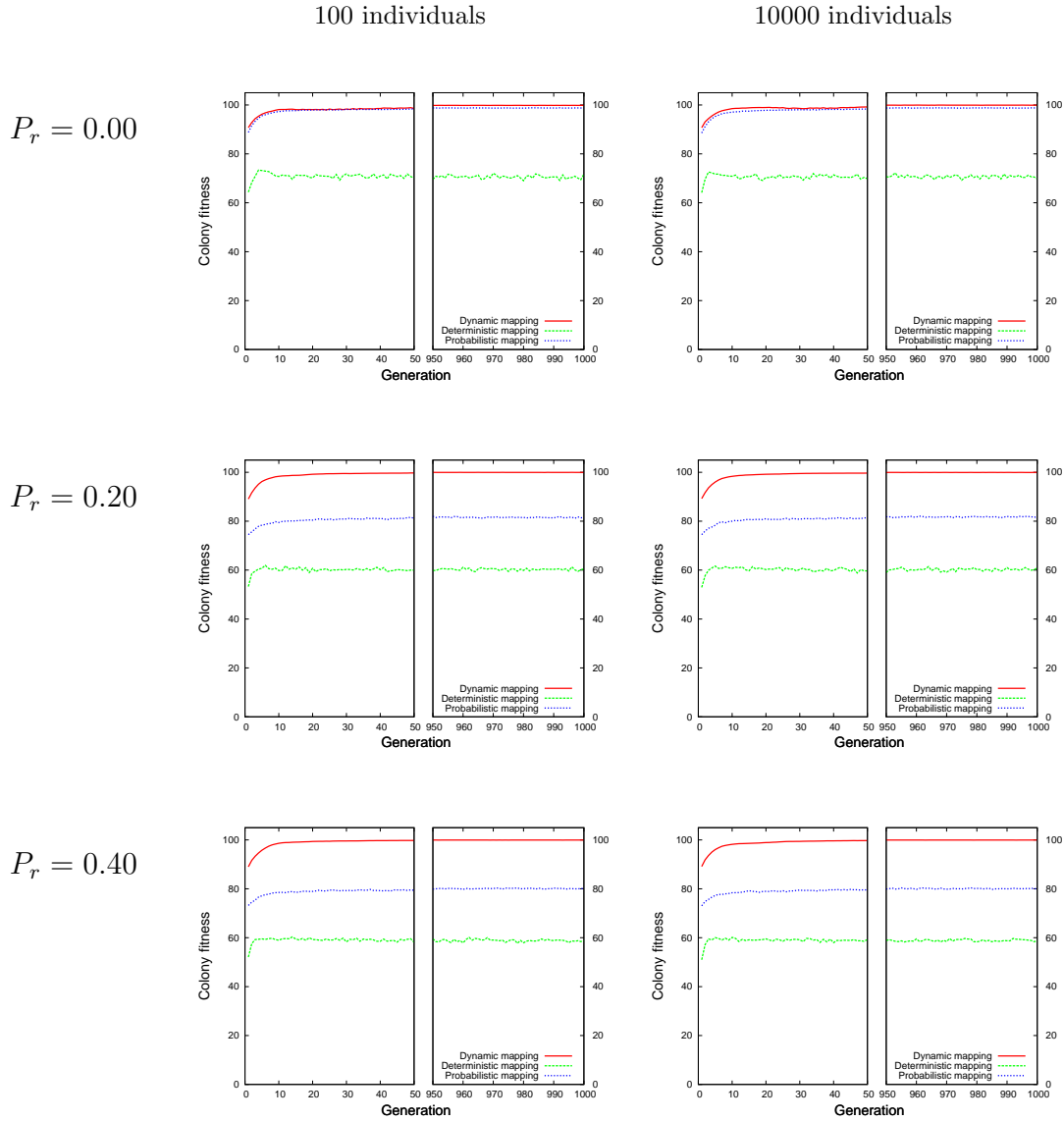
Figure 2: Mean fitness values (10 runs) for the first 50 and last 50 generations in colonies with 100 or 10'000 individuals. Values are given for three different reallocation probabilities P_r and each of three genetic architectures (dynamic: red solid line, deterministic: green dashed line and probabilistic: blue dotted line). Increased colony size does not lead to marked differences in relative performance of the three genetic architectures.