

Figure S1. Potential beehive locations (N=84454) in the landscape (grid cells bordering oil-seed rape fields, see Fig. 1).

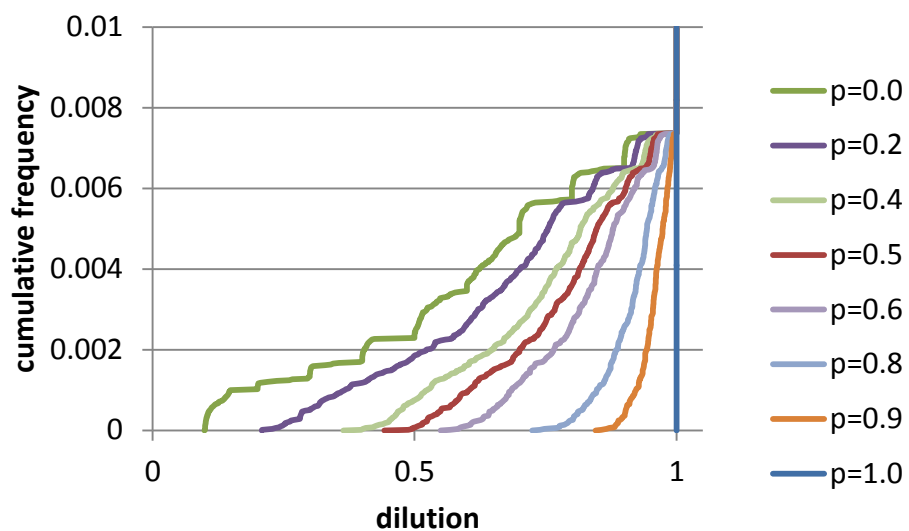


Figure S2. Cumulative frequency of dilution factors for all sites. Fewer than 0.75 % of the 48854 sites have a dilution factor < 1 . For these sites, the probability of target crop spraying p determines the dilution that can be obtained.

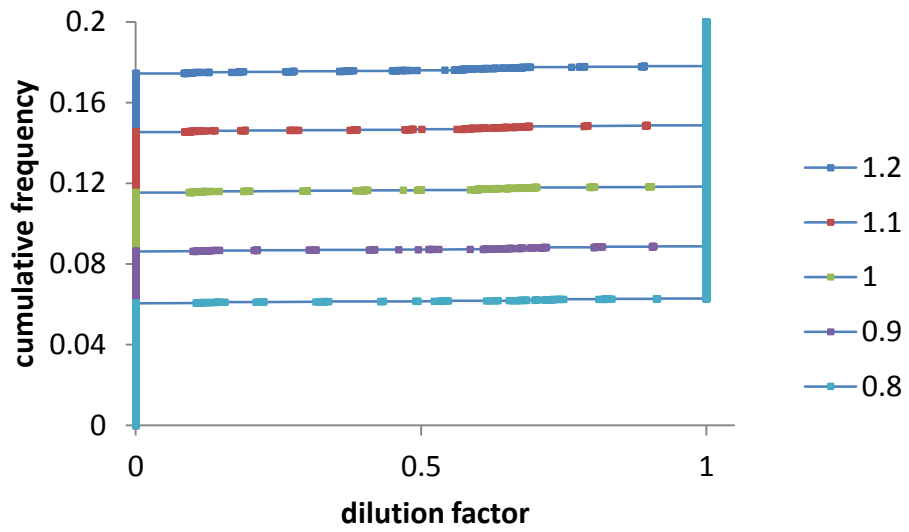


Figure S3. Cumulative frequency for range of values of sugar content of alternative resources (crop with the same characteristics as oil-seed rape, but different sugar content).
 Multiplication factor for sugar content 0.8, 0.9, 1, 1.1 and 1.2

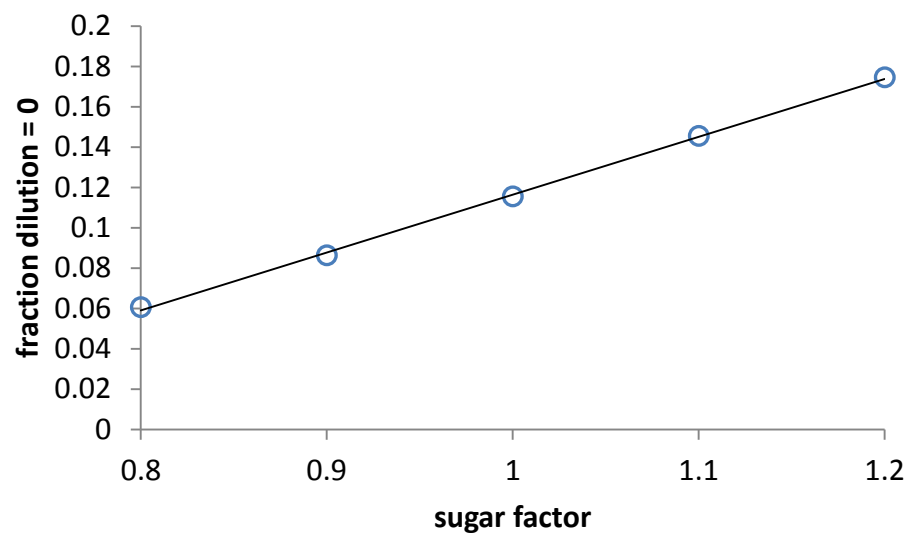


Figure S4. The fraction of sites for which the dilution is zero (no exposure at all), for different values of the sugar content multiplication factor.

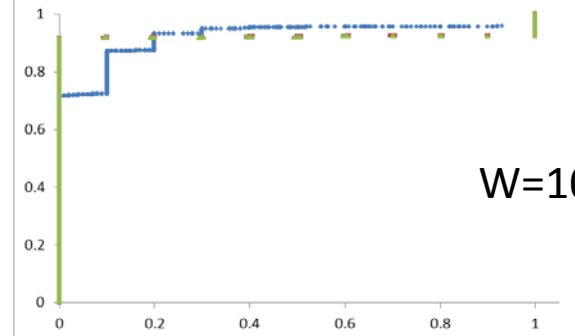
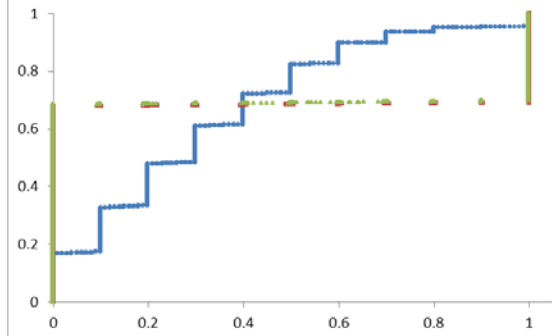
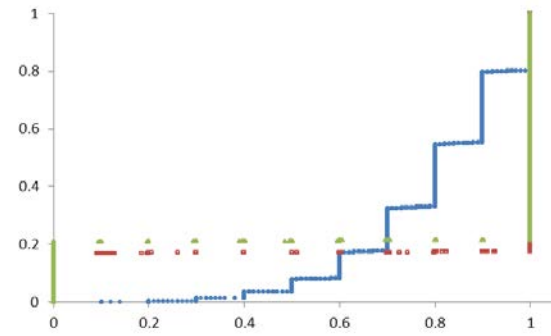
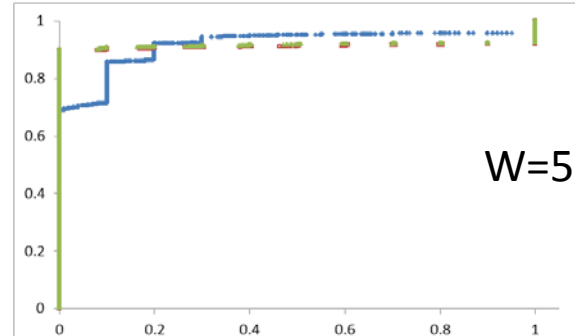
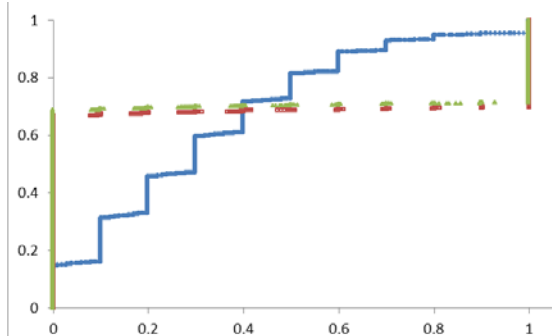
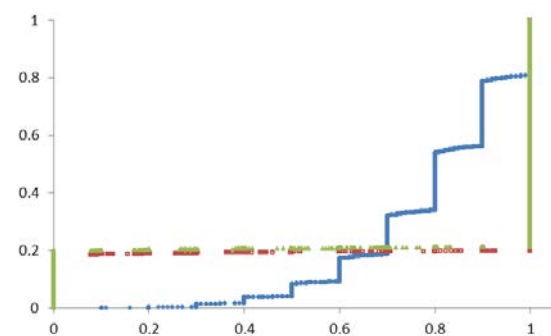
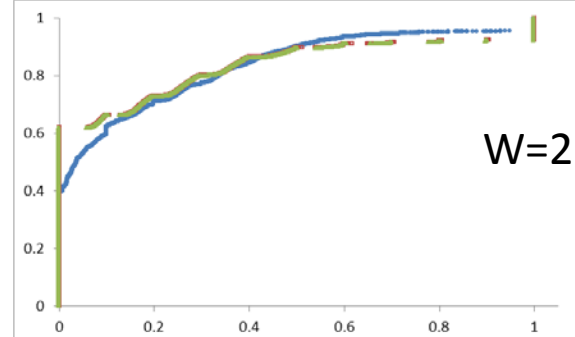
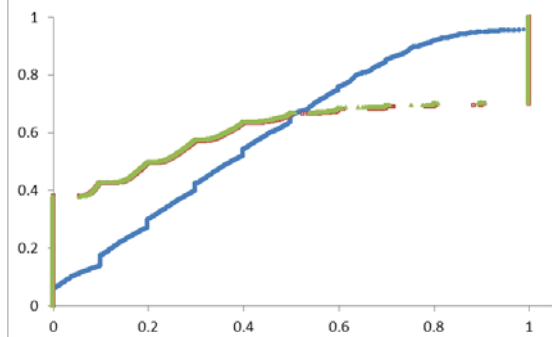
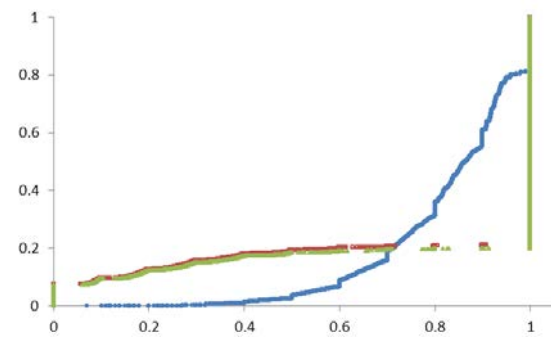
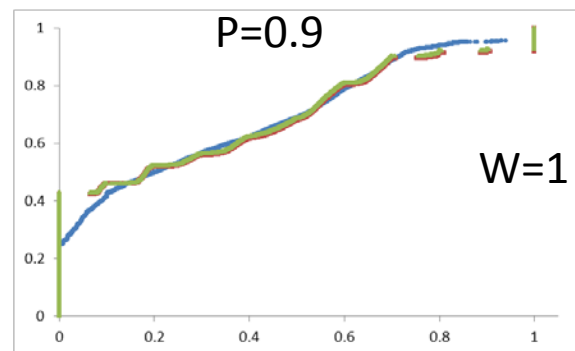
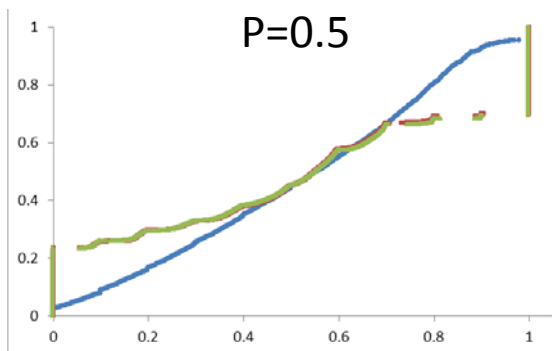
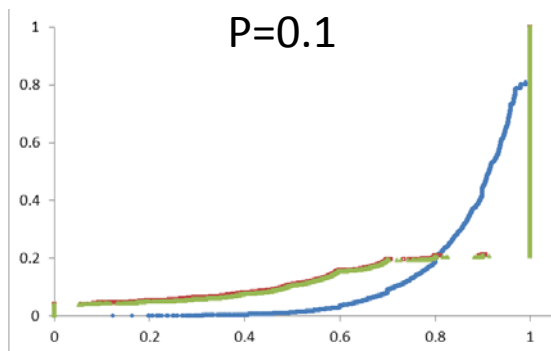


Figure S5. Some of the cumulative distributions of dilution factors, for different combinations of the probability of a flower strip being present on one the four sides of a field (p) and width (w) of the flower strip, in meters. Blue line: the cumulative distribution resulting when for each site the results are averaged over 10 simulations (each simulation producing a different landscape configuration in terms of flower strips present).

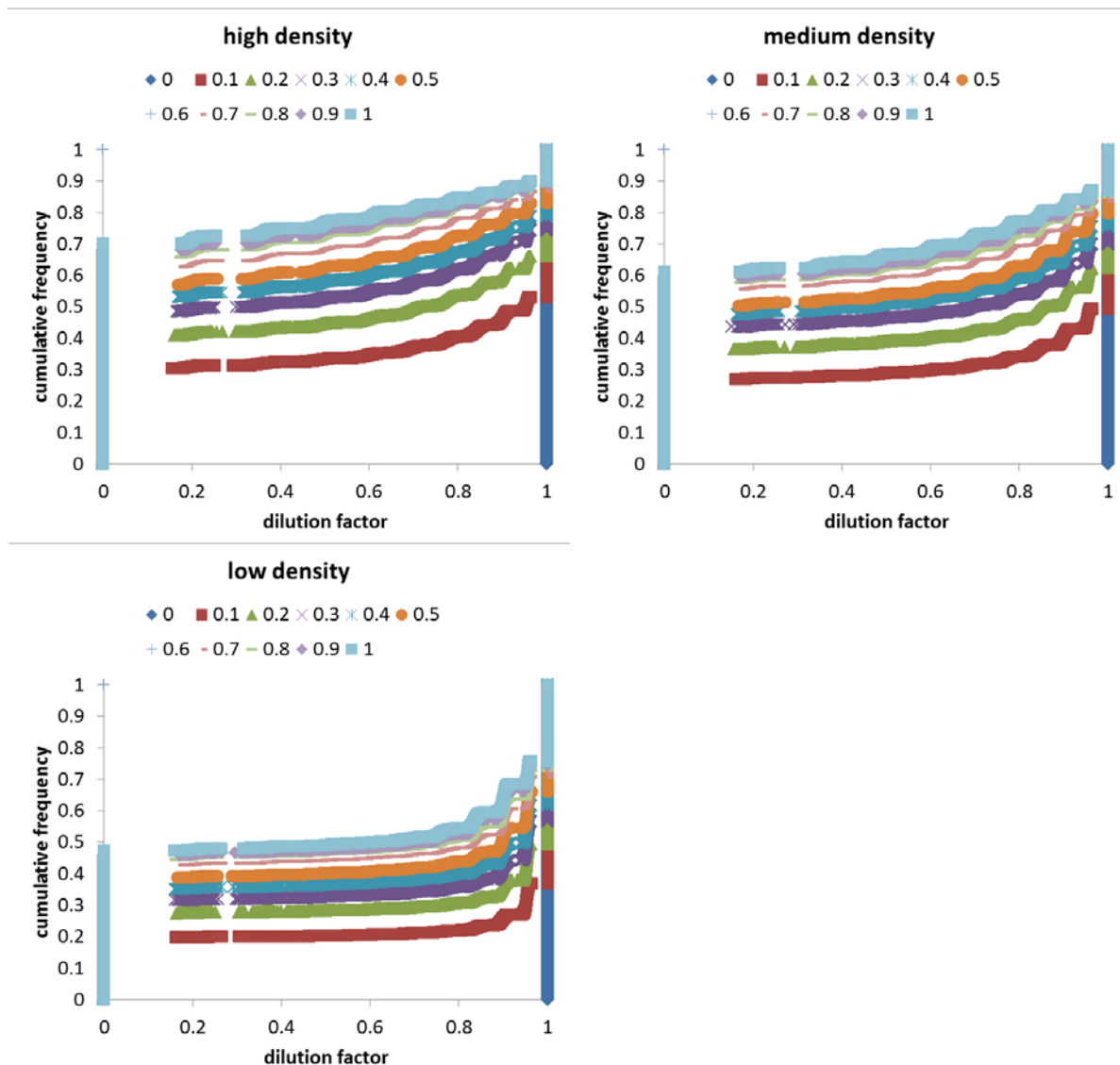


Figure S6. The cumulative frequency distribution of dilution factors, for different values of the probability p_{res} of an off-field patch being a resource patch, and for different qualities of the off-field resource (represented by flower density). Results from a single simulation (variation between simulations was small).