$mpk_i^* \leq mpk_{Th}^*$	$lat_i \leq lat_{Th}$	Fate
Yes	No	1º
No	Yes	2º
Yes	Yes	3º
No	No	m

Table S1. Fate assignment based on threshold values. For each of the six vulval precursor cells, the dimensional solution to model equations (7) is compared against the thresholds (mpk_{Th}^* , lat_{Th}) to determine its fate choice. This procedure leads to a six-cell pattern of fates. The values of the thresholds are varied to examine the robustness of model predictions to threshold settings (see Materials and Methods).