

4.1 Larval mechanosensation

Larvae can be assayed for their mechanosensory responses by stroking forward-moving animals across one side of their thoracic segments with

an eyelash (23) (see Figure 3). Responses are measured on a scale of zero to four:

- no response is scored as zero
- hesitation as one
- withdrawal of anterior segments and turning as two
- a single reverse contractile wave followed by turning as three
- multiple reverse contractile waves, retreats, and turning as four

uncoordinated (unc) and *uncoordinated-like (uncl)* have been identified from such screens (23).

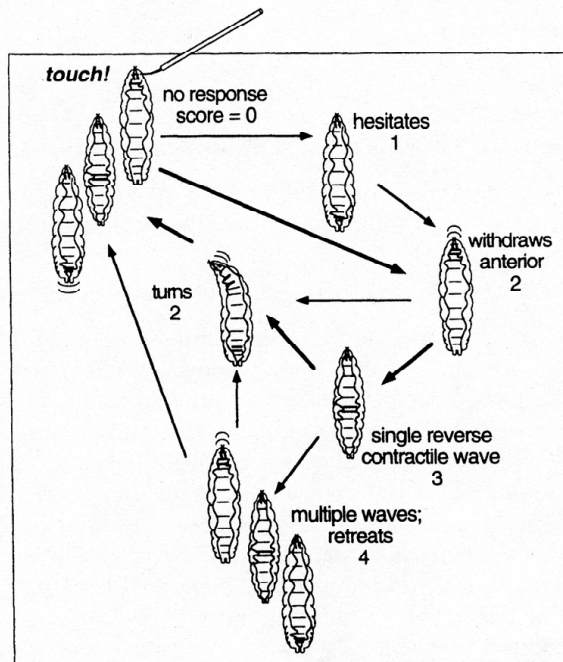


Figure 3. Schematic illustration of larval mechanosensory responses. Larvae are stroked across one side of their thoracic segments with an eyelash. Thicker arrows indicate the most commonly observed responses. More rarely, larvae show several waves of reverse contractions (thinner arrows). Responsiveness is registered on a scale of 0–4 as indicated. Reproduced with permission from ref. 23.