Study questions how well a model organism driven by reproductive self-destruction translates to human aging research

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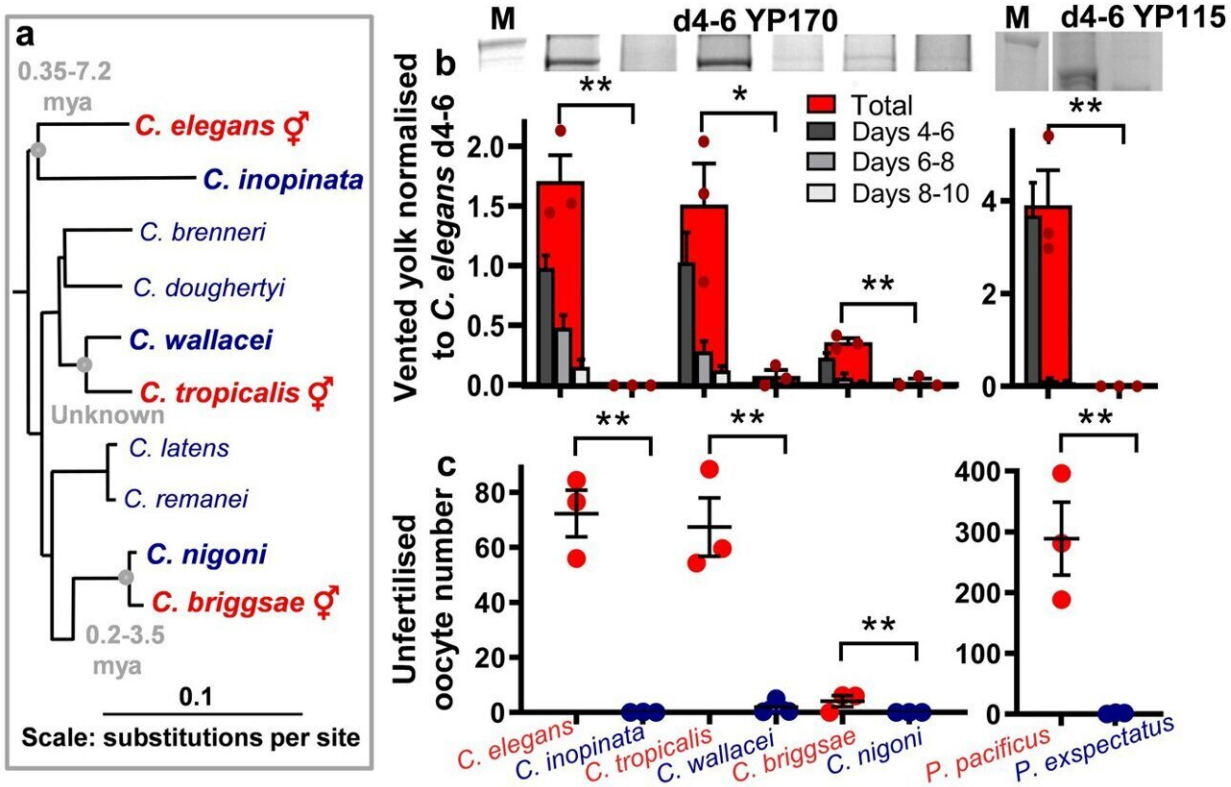

Caenorhabditis hermaphrodites exhibit yolk venting and a shorter lifespan. **a** Phylogenetic tree showing androdioecious and gonochoristic *Caenorhabditis* sibling species[76]. Estimate of the time since the origin of selfing in hermaphrodites: *C. elegans*, 0.35–7.2 MYA; *C. briggsae*, 0.2–3.5 MYA (ref. [77]); *C. tropicalis*, still unknown. **b** Yolk venting present in hermaphrodites but not in females (n = 100 per trial). Top: major YP at the peak of venting. Bottom:

Quantitative data normalized to total yolk on d4-6 in *C. elegans*. M = Marker. For full gel see Source Data. **c** Unfertilised oocytes are laid by hermaphrodites but not females (3 trials; $n = 10$ per trial). **d** Greater internal levels of major YP in *Caenorhabditis* hermaphrodites and *P. pacificus* hermaphrodites. YP bands normalized to myosin to adjust for species differences in body size. One-way ANCOVA ($n = 10$). For all internal YPs and gel image see Supplementary Fig. 1c, d. **b, d** Protein gel electrophoresis data with colloidal Coomassie blue staining. **b**-**e** Animals are unmated. **b,c,d** Mean ± s.e.m. of 3 trials with each dot representing one trial. **b, c** One-way ANOVA (Bonferroni correction) or two-tailed unpaired *t*-test. * *p*