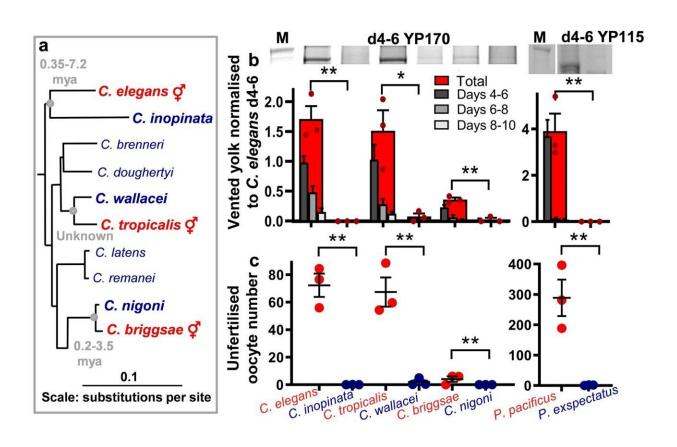


## Study questions how well a model organism driven by reproductive self-destruction translates to human aging research

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Caenorhabditis hermaphrodites exhibit yolk venting and a shorter lifespan. **a** Phylogenetic tree showing androdioecious and gonochoristic *Caenorhabditis* sibling species<sup>76</sup>. 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. <sup>77</sup>); *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  $\pm$  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

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