REPRODUCTION - LONGEVITY TRADEOFF

Aging is a hot topic and there are several journals dealing with the physiological and genetic aspects of its progression. However, the full understanding of aging, especially its evolutionary significance, is not fully understood (see previous posts on this topic). The numerous theories on the subject testify to the complexity of the matter. One theory emphasizes the trade-off relationship between reproduction fitness and the aging process. Wu et al. (PNAS) identified, in *Caenorhabditis elegans*, an antagonistic pleiotropic gene, *trl-1*, whose mutants increased brood size but shortened animal lifespan and specifically impaired longevity induced by germline deficiency: a compromise between fitness and longevity. They have not found a corresponding gene in higher organisms, but, they propose, this is a line of research worth exploring.

1-https://www.pnas.org/doi/10.1073/pnas.2120311119?url_ver=Z39.88-2003&rfr_id=ori%3Arid%3Acrossref.org&rfr_dat=cr_pub++0pubmed