Review of: "The Assembly of the Y Chromosome Reveals Amplification of Genes Regulating Male Fertility in Bactrocera Dorsalis"

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Very informative article. The topic chosen is very appropriate. The objectives are well formulated. The methodology is also well-protocolled. The article reports the discovery of Y chromosomes such as 32 copies of *gyf-like* and their possible links with the fertility of male fruit flies, especially for the amplification of *gyfY*. The work is very significant as the oriental fruit fly *Bactrocera dorsalis* is an invasive pest causing considerable ecological and economic damage worldwide. The results are quite interesting. The assembled Y chromosome is highly repetitive and contains 61 genes, including 9 multi-copy genes. We surprisingly found that the M factor (*MoY*) in Tephritidae has multiple copies, verified by our droplet digital PCR (ddPCR) analysis. The work is concluded well. The results will also provide target genes for CRISPR/Cas9-based SIT, leading to the development of novel control strategies against tephritid flies.