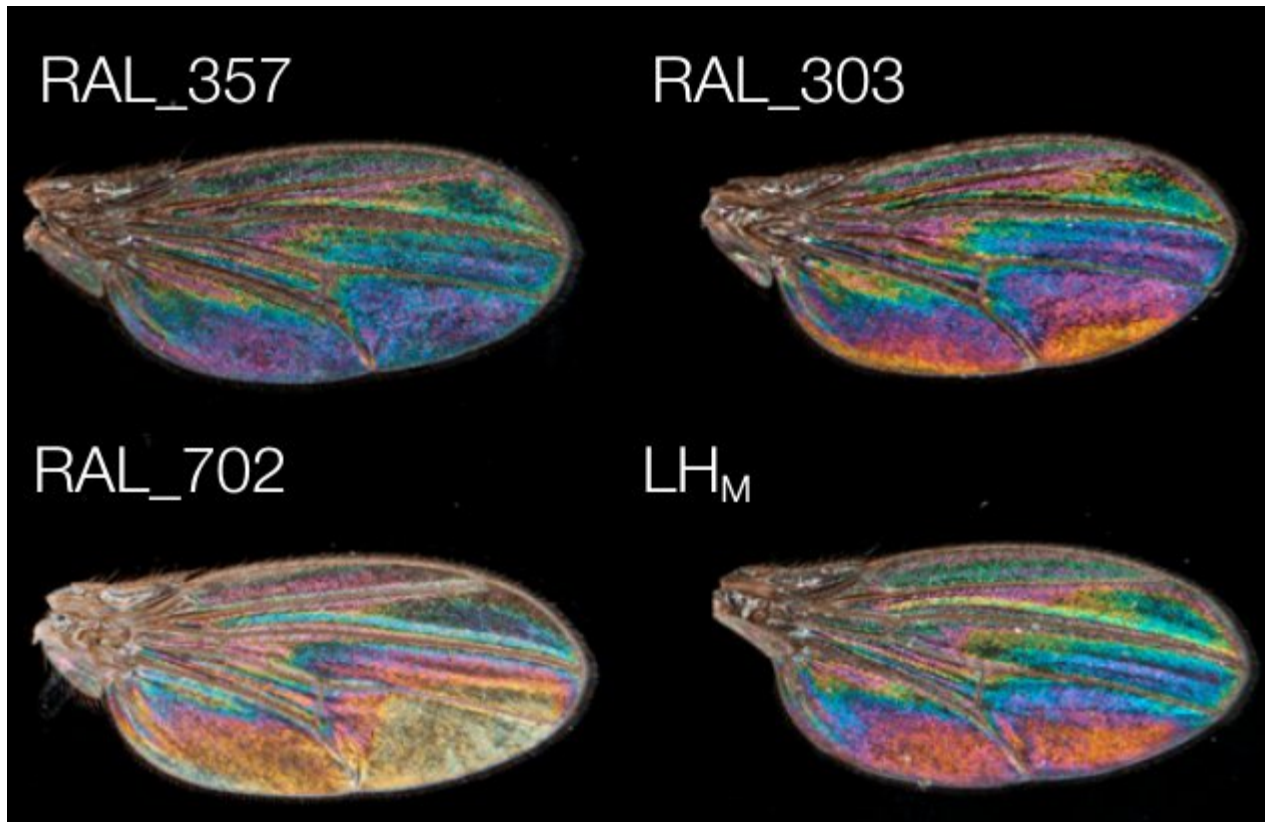
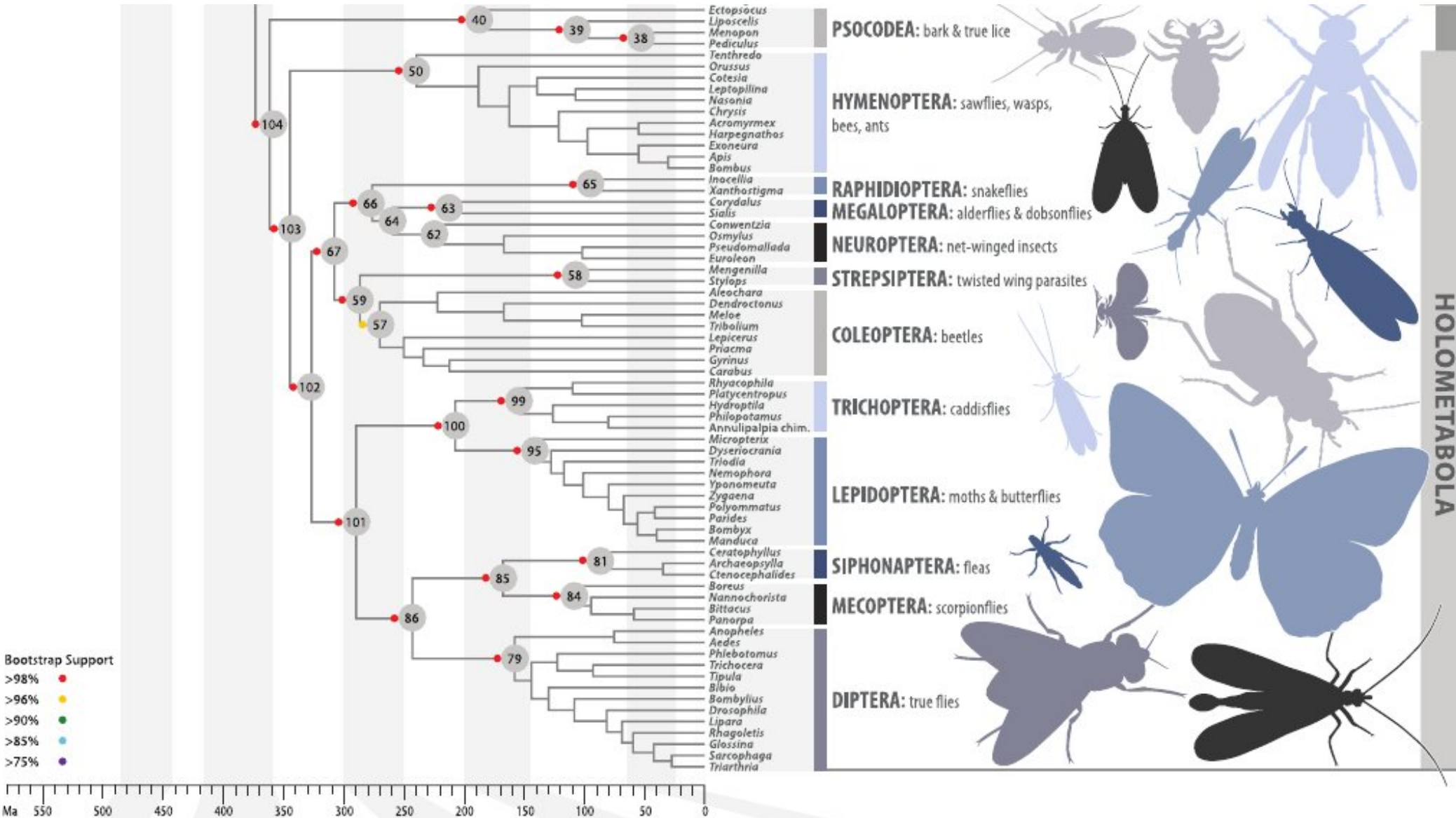


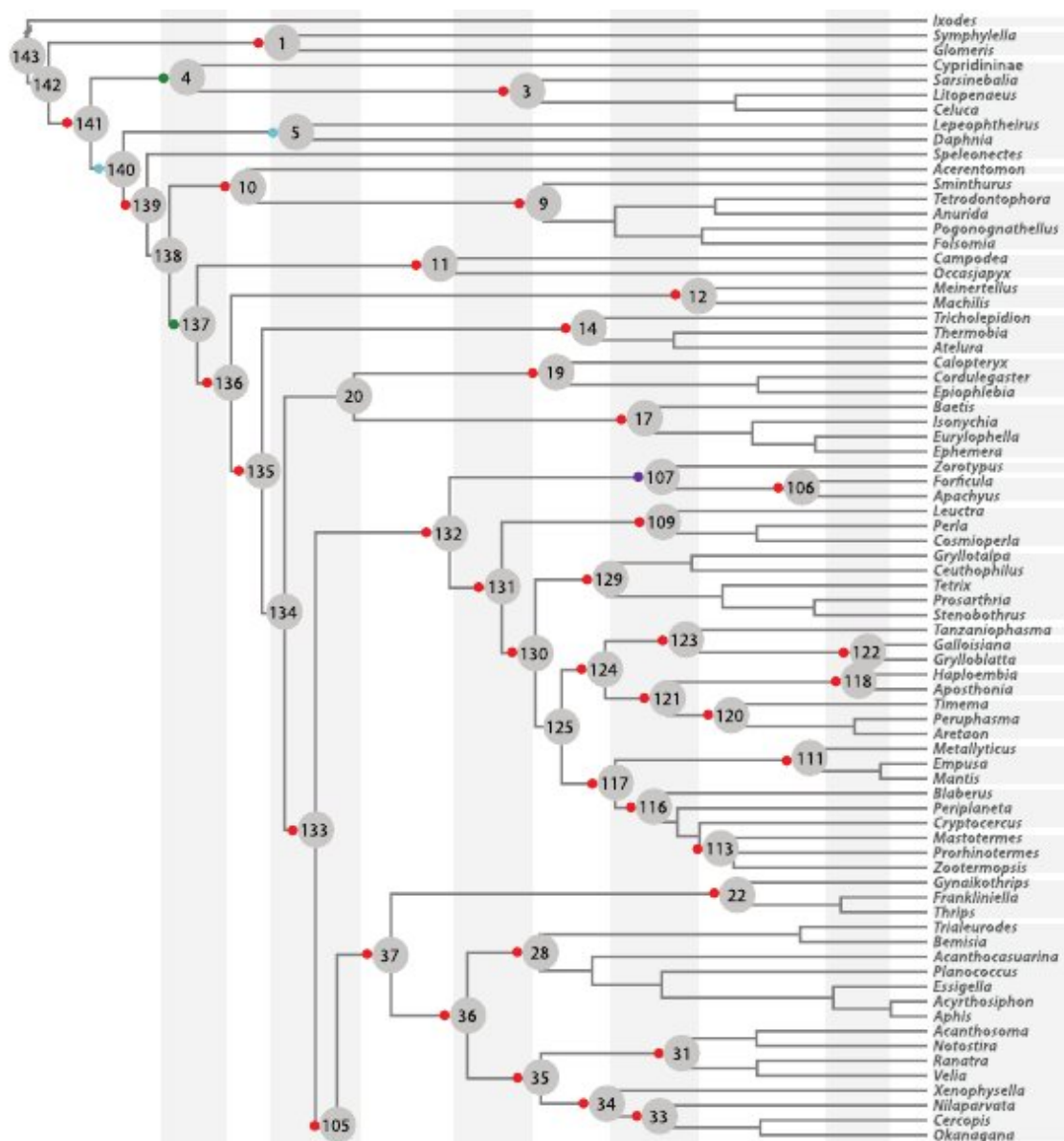
# Sexual selection on wing interference patterns in *Drosophila melanogaster*

Natsu Katayama<sup>a</sup>, Jessica K. Abbott<sup>b</sup>, Jostein Kjærandsen<sup>c</sup>, Yuma Takahashi<sup>d,e</sup>, and Erik I. Svensson<sup>b,1</sup>



# Phylogenomics resolves the timing and pattern of insect evolution





**CHELICERATA  
MYRIAPODA**

**CRUSTACEANS**

**PROTURA:** coneheads

**COLLEMBOLA:** springtails

**DIPLURA:** two-pronged bristletails

**ARCHAEOGNATHA:** jumping bristletails

**ZYAGENTOMA:** silverfish

**ODONATA:** damselflies & dragonflies

**EPHEMEROPTERA:** mayflies

**ZORAPTERA:** ground lice

**DERMAPTERA:** earwigs

**PLECOPTERA:** stoneflies

**ORTHOPTERA:** crickets & katydids

**MANTOPHASMATODEA:** gladiators

**GRYLLOBLATTODEA:** ice crawlers

**EMBIOPTERA:** webspinners

**PHASMATODEA:** stick & leaf insects

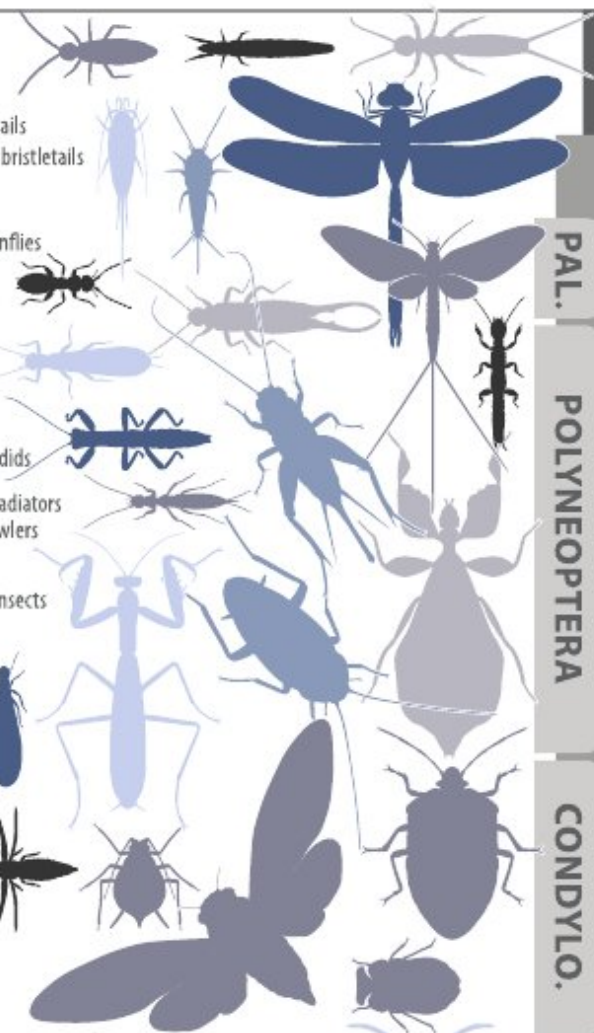
**MANTODEA:** praying mantids

**BLATTODEA:** cockroaches

**ISOPTERA:** termites

**THYSANOPTERA:** thrips

**HEMIPTERA:** bugs, cicadas,  
plant lice



**HEXAPODA**

**PAL.**

**POLYNEOPTERA**

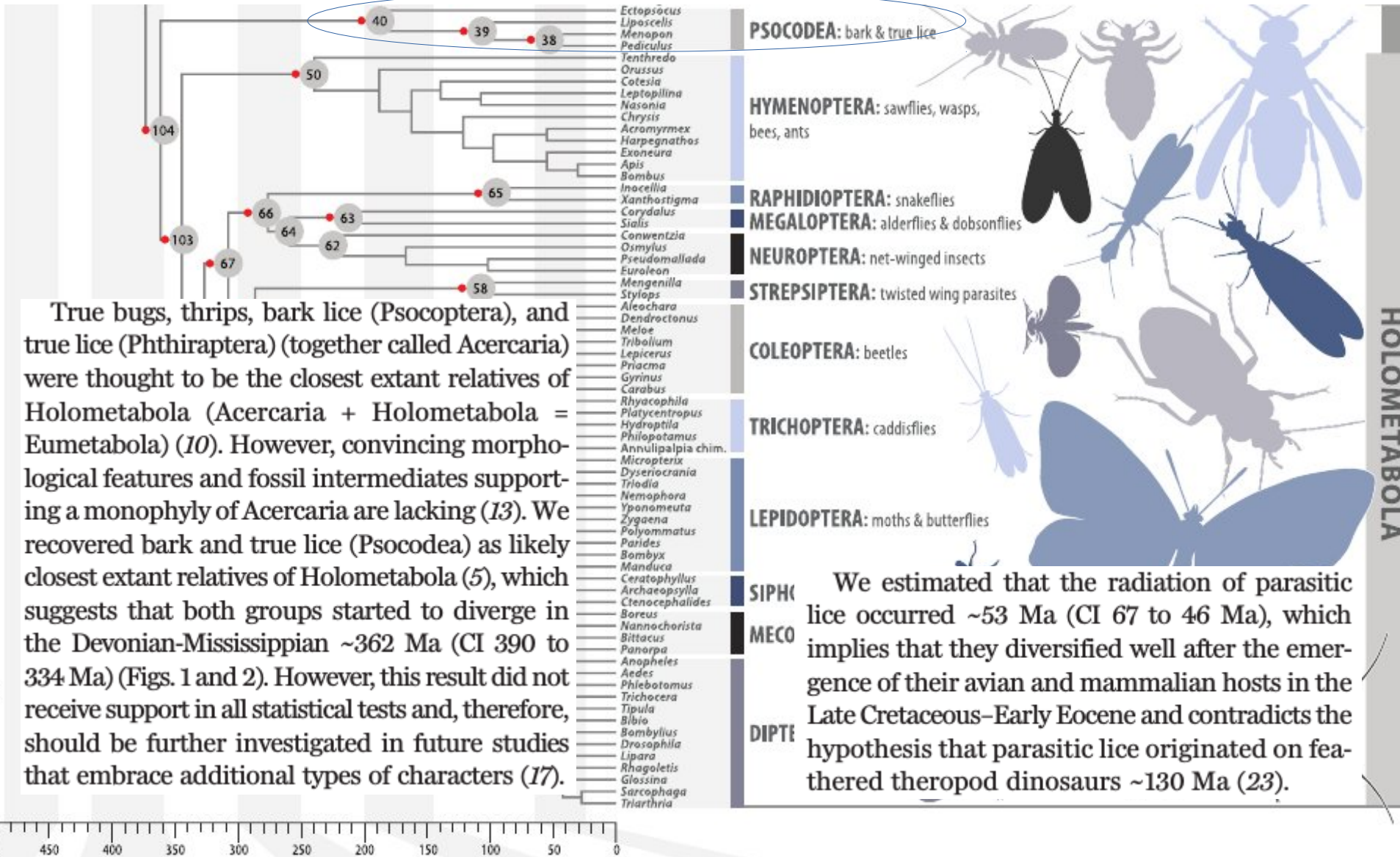
**INSECTA**

**CONDYLO.**



# Transcriptome sequences of three lice species

*Menopon gallinae*  
*Ectopsocus briggsi*  
*Liposcelis bostrychophila*



**EVOLUTIONARY BIOLOGY**

# Rapid evolution of a native species following invasion by a congener

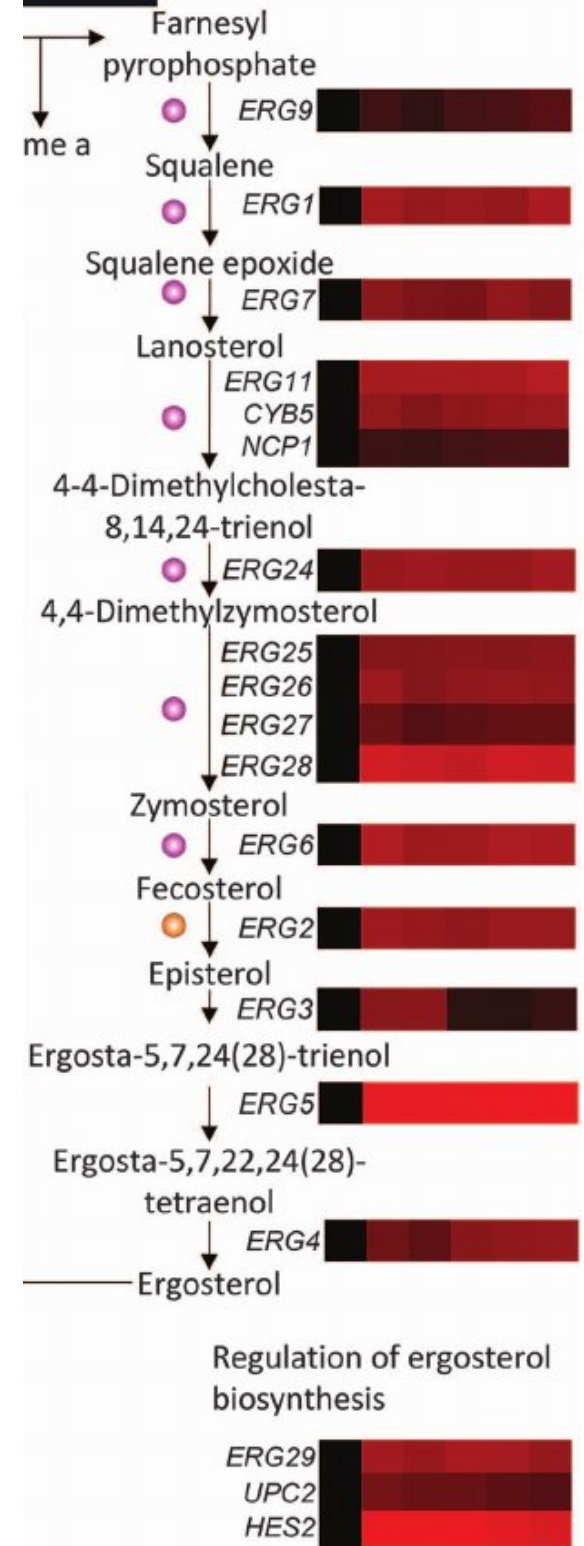
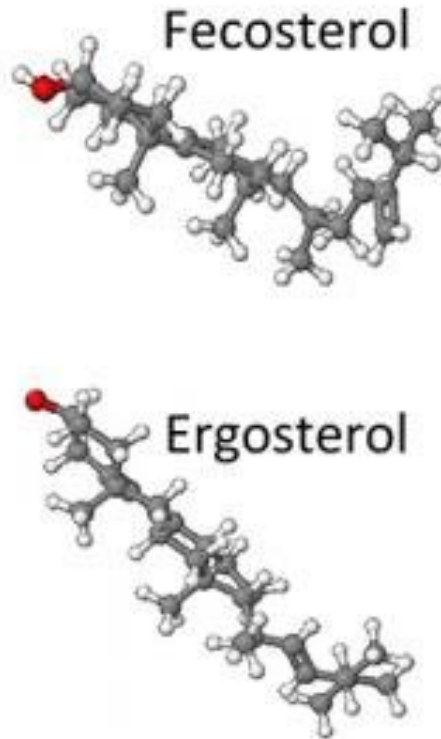
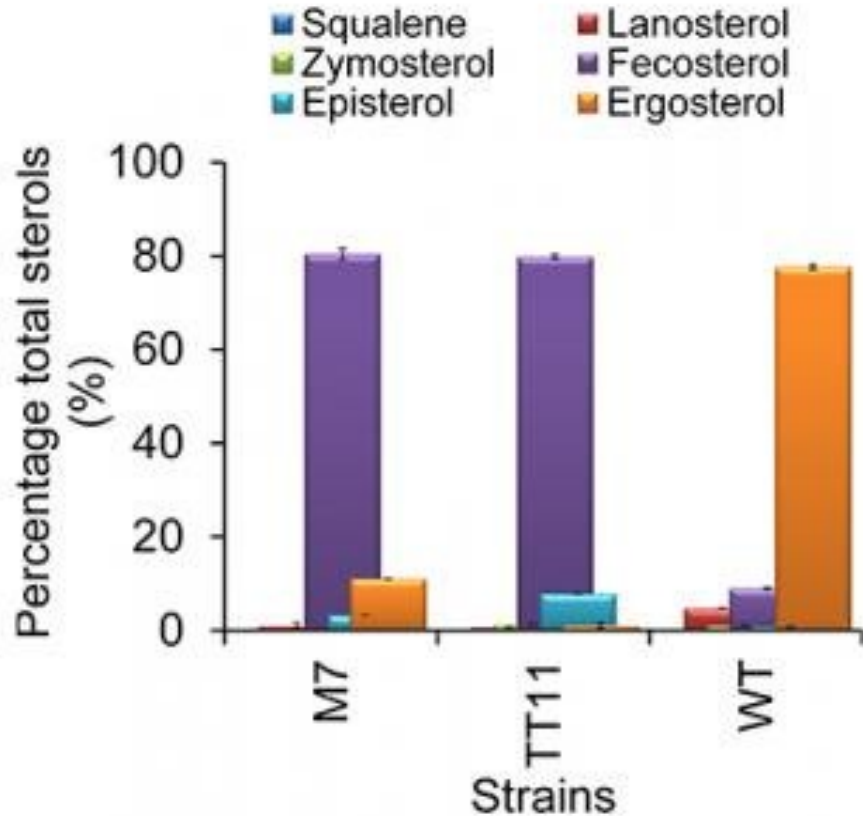


Native green anoles (left) have evolved better gripping feet in response to an invasion of brown anoles (right) on islands in Florida.



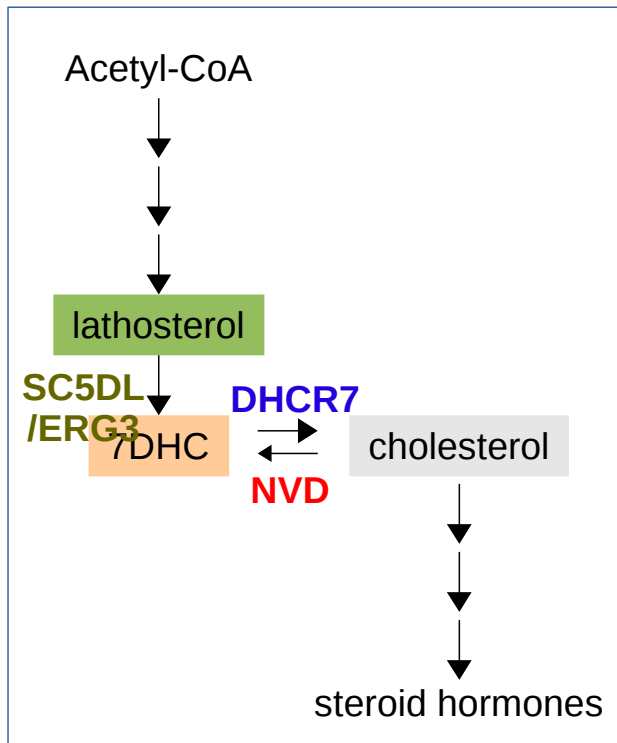
# Altered sterol composition renders yeast thermotolerant

Three replicates. All have nonsense mutations in *ERG3*.

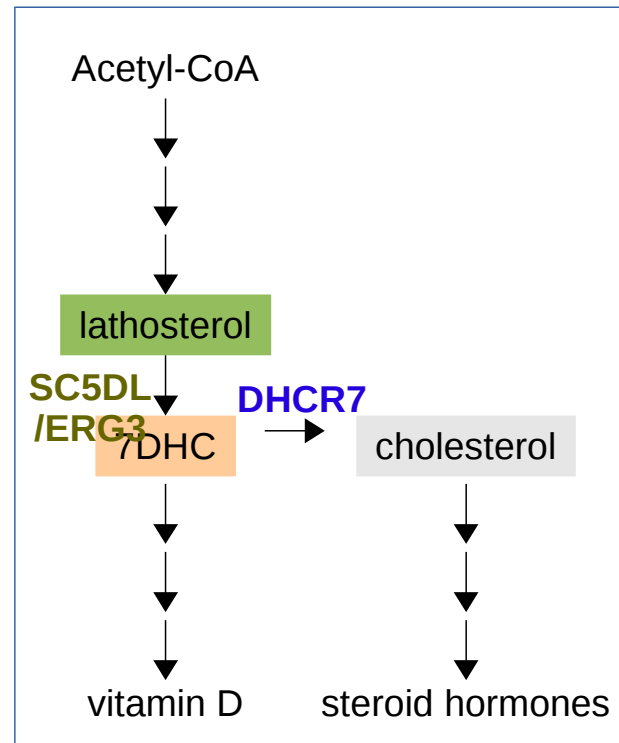


# *nvd* versus *ERG3*

Sea anemone *Nematostella*

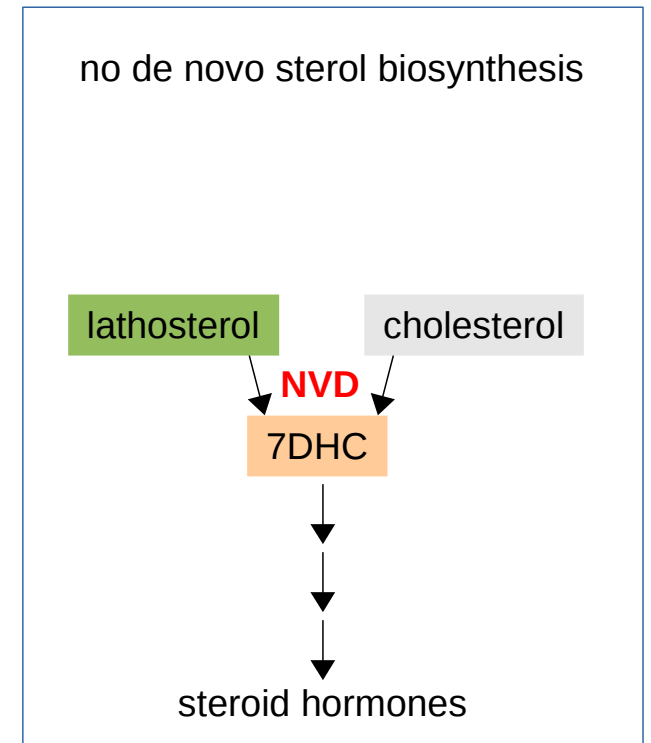


Mammals



no **NVD**

*Drosophila*



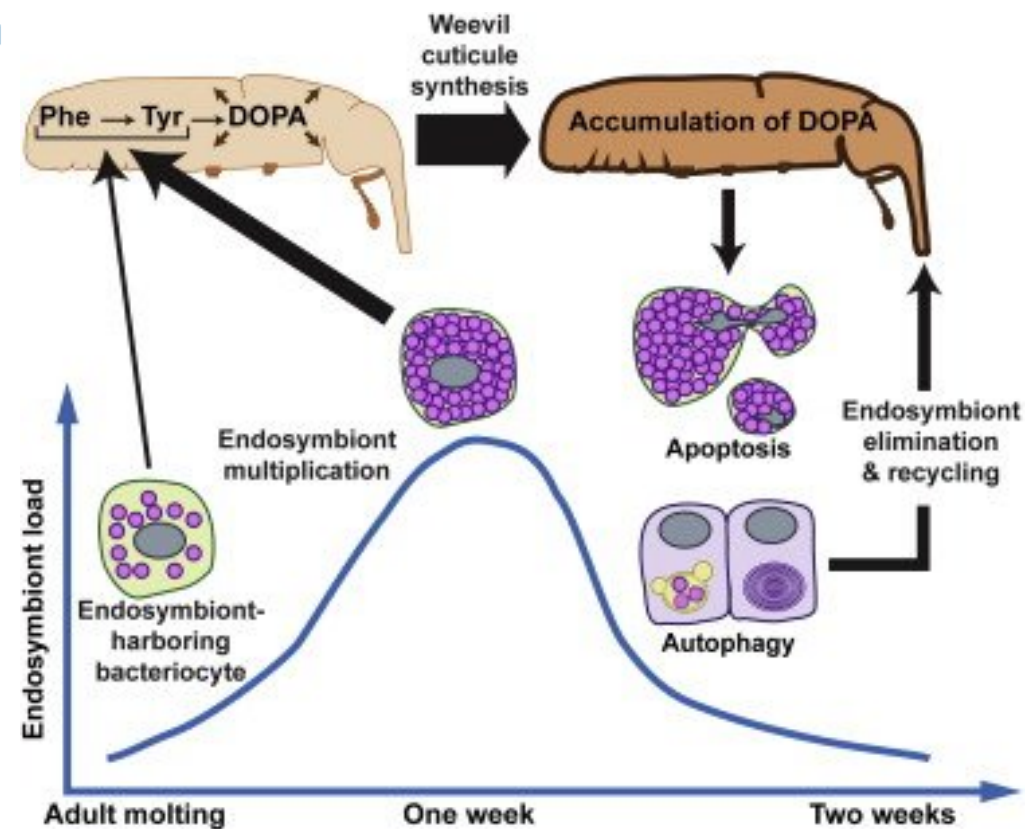
no **DHCR7**

no **SC5DL/ERG3**

# Insects Recycle Endosymbionts when the Benefit Is Over

Aurélien Vigneron,<sup>1,2</sup> Florent Masson,<sup>1</sup> Agnès Vallier,<sup>1</sup>  
Séverine Balmand,<sup>1</sup> Marjolaine Rey,<sup>1</sup>  
Carole Vincent-Monégat,<sup>1</sup> Emre Aksoy,<sup>1</sup>  
Etienne Aubailly-Giraud,<sup>1</sup> Anna Zaidman-Rémy,<sup>1</sup>  
and Abdelaziz Heddi<sup>1,\*</sup>

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69621 Villeurbanne, France





# Sympatric Speciation in a Bacterial Endosymbiont Results in Two Genomes with the Functionality of One

