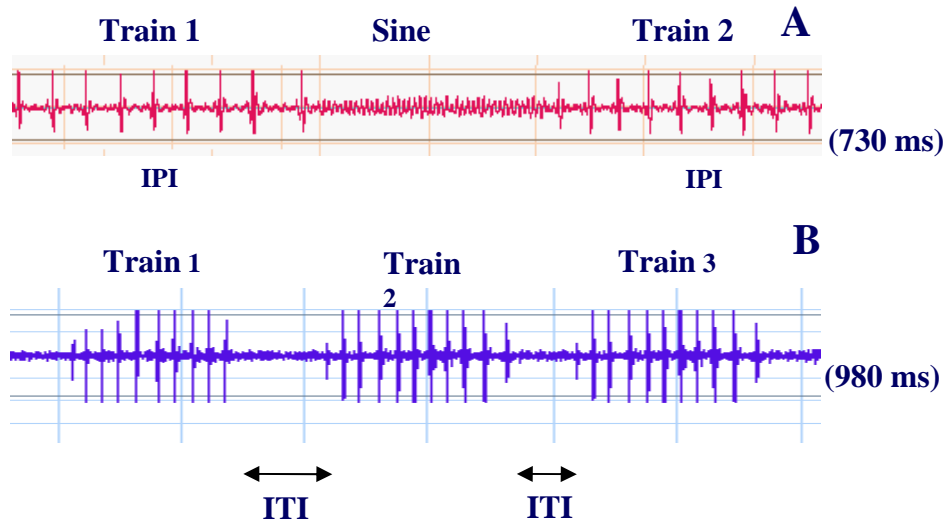


COURTSHIP SONG PATTERNS IN *D. MELANOGASTER* POPULATIONS

We suppose that previously discovered females discrimination behavior may be associated with courtship song particularities, revealed in this study, reflecting differences in adaptive life strategies for flies inhabiting opposite slopes of the canyon.

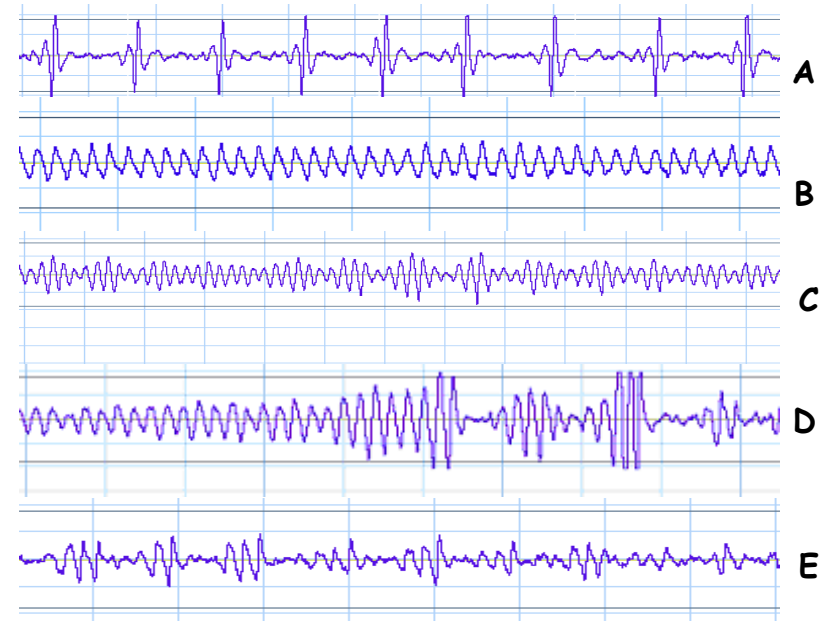


Typical oscillograms of the male courtship song



(A) The interval between the two consecutive pulses corresponds to the inter-pulse interval within one train (IPI) only if it was shorter or equal to 80 ms; (B) otherwise, it was referred to as inter-train interval (ITI).

Oscillograms of male courtship song (SFS males)



(A) normal pulse song; (B) normal sine song; (C, D) examples of mixed song; and (E) polycyclic pulses.

NFS females provoke more courtship efforts in males of both types, as expressed in the prolonged duration of trains and increased number of pulses in a train. SFS males court both female types more intensively than NFS males, displaying a shorter ITI. Evidently, SFS males are able to discriminate between the females and correspondingly change their IPI frequency making court to females from the opposite slope, using more intensive stimulation and tending to extend sine-trains during the courtship (Iliadi et al., 2009).