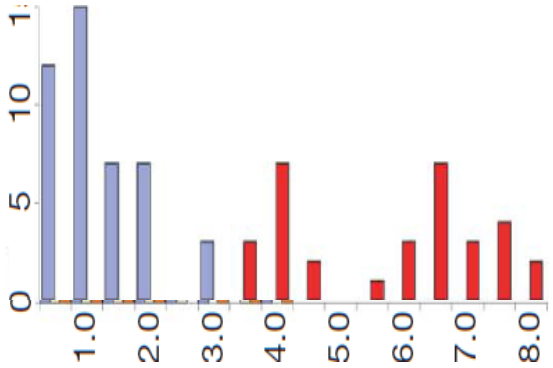
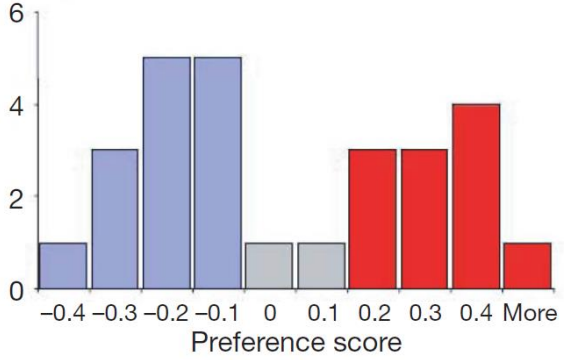
Pundamilia species complex

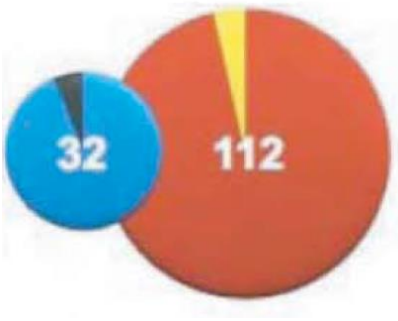
Water depth distribution



Female preference



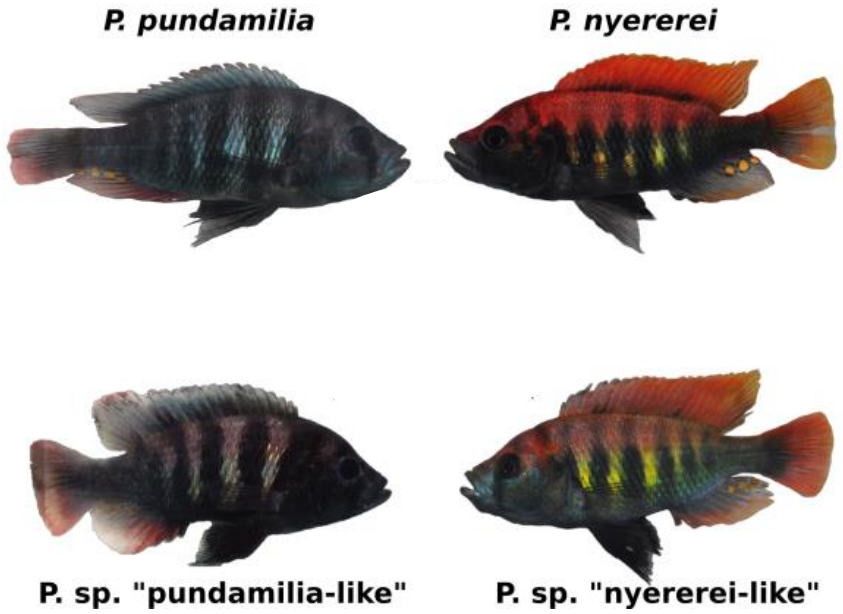
LWS opsin alleles



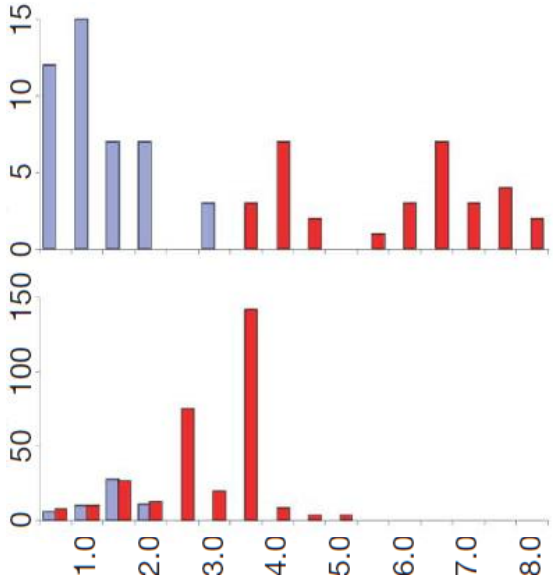
Seehausen *et al*., 2008, Nature

Parallel differences in phenotype, water depth, color vision

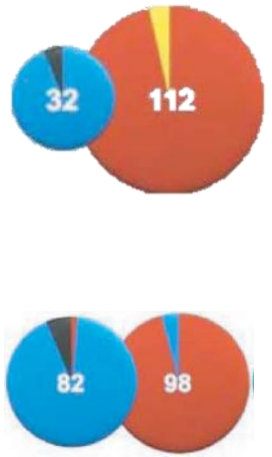
Male nuptial coloration



Water depth distribution



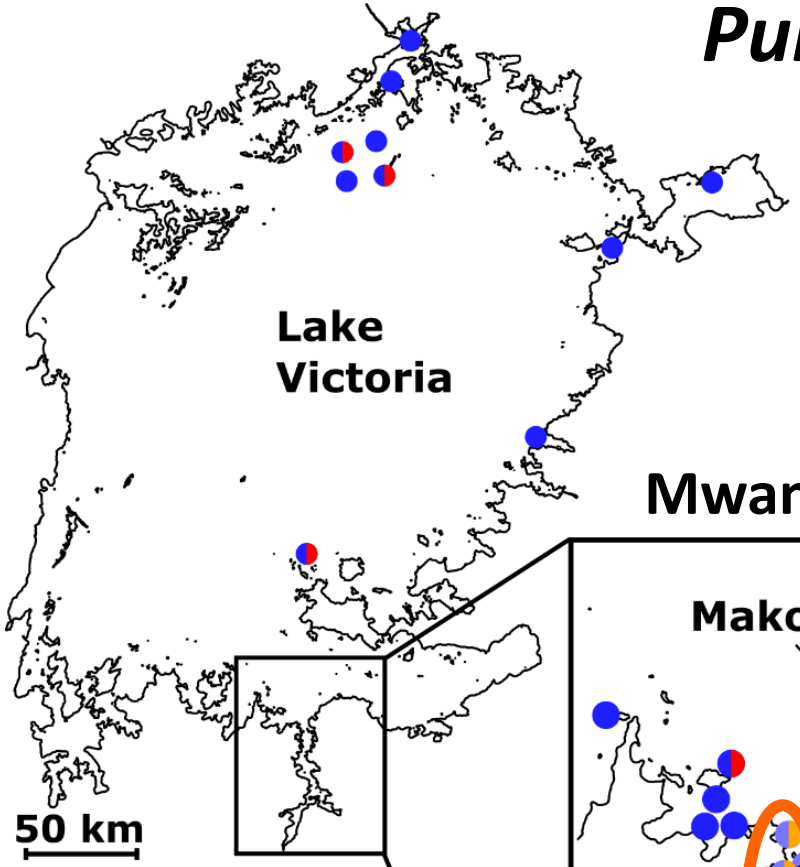
***LWS* opsin haplotypes**

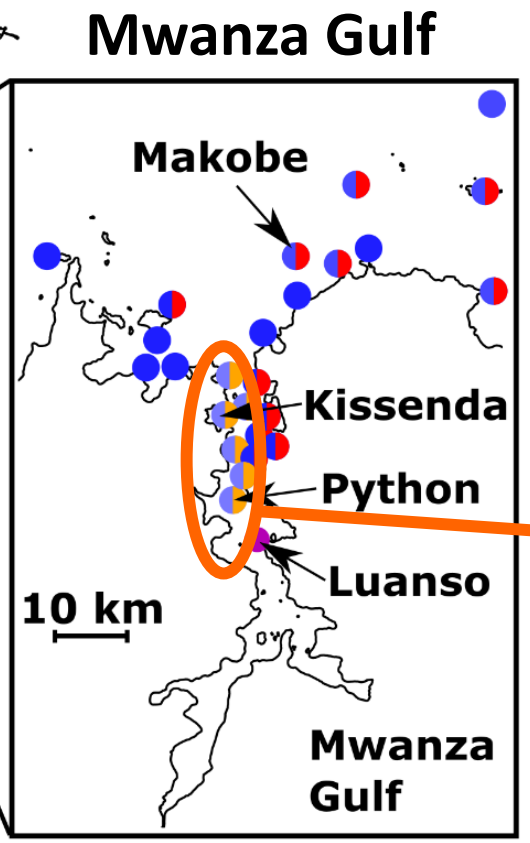


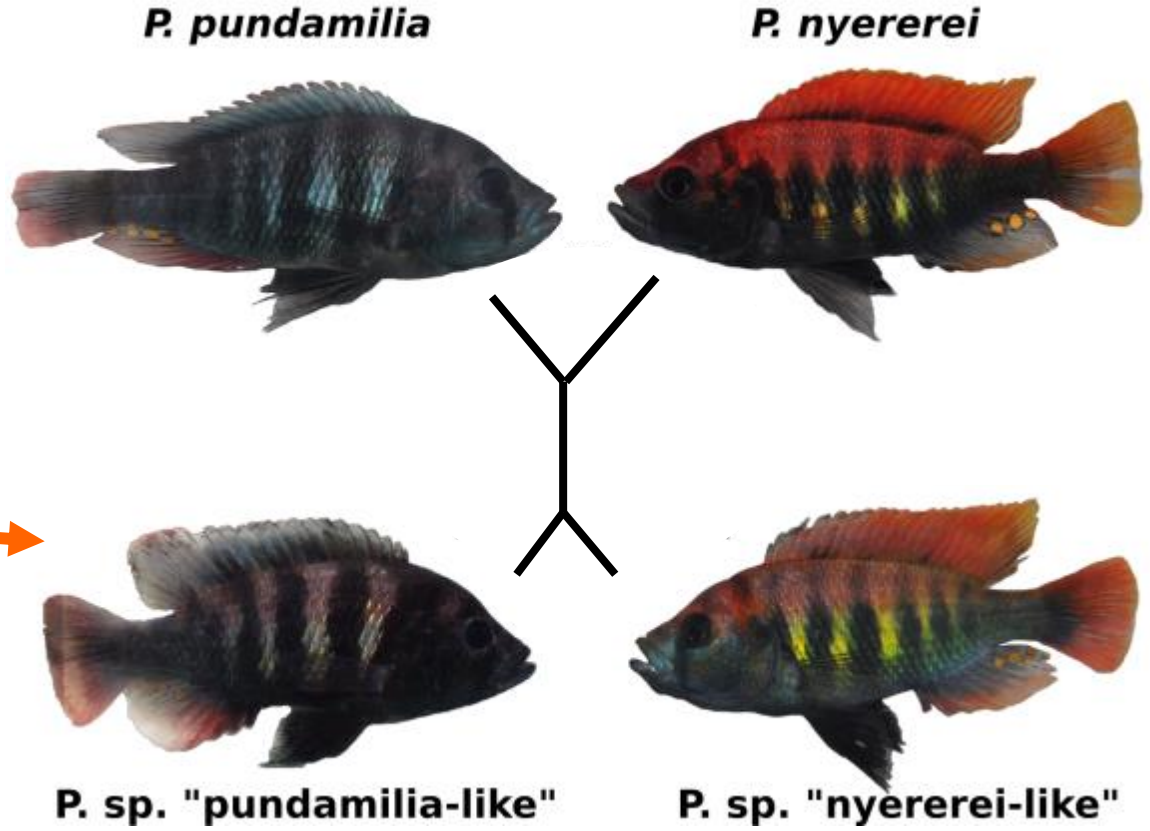
Seehausen *et al.*, 2008
Seehausen, 2009

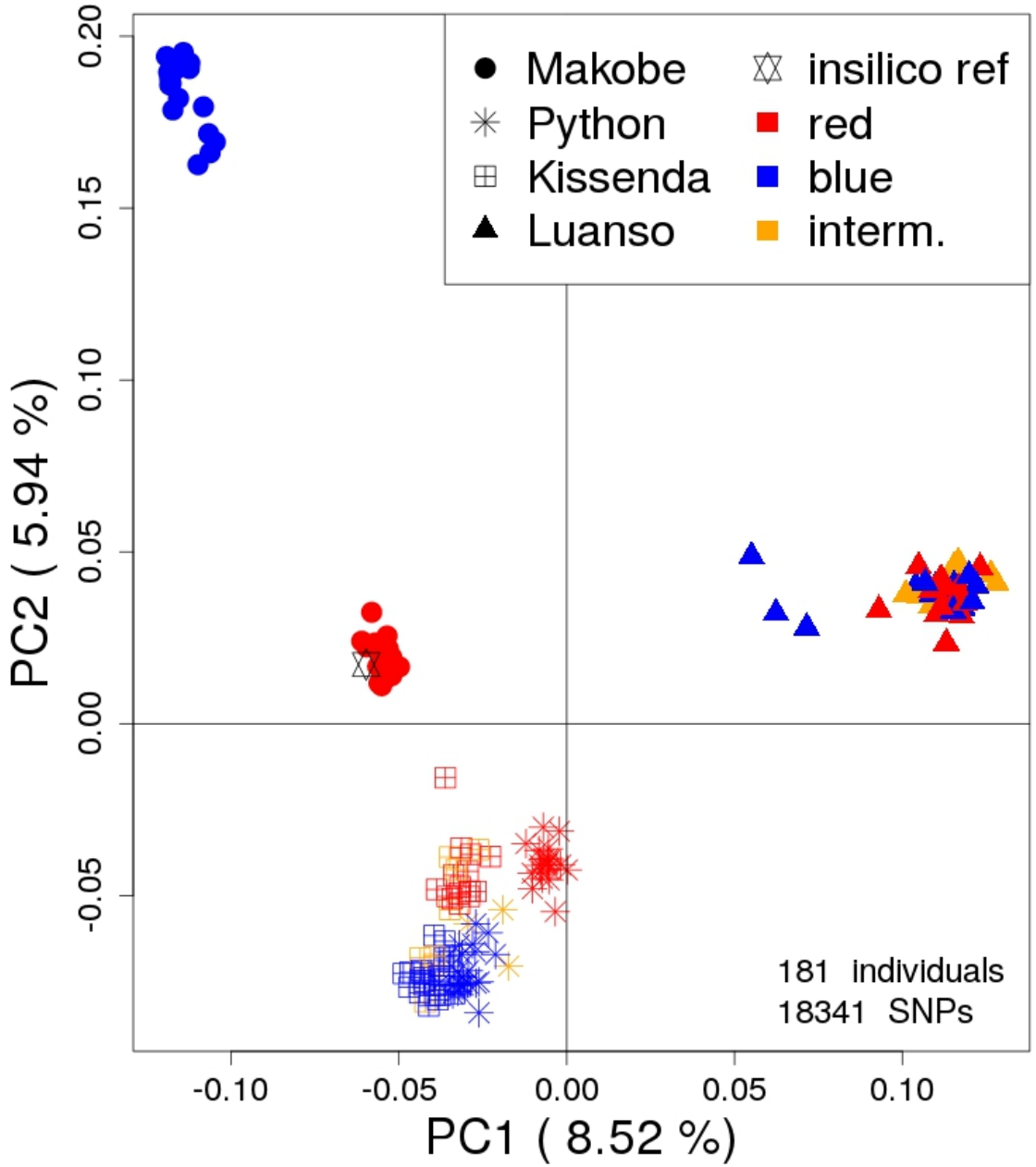
Pundamilia species complex

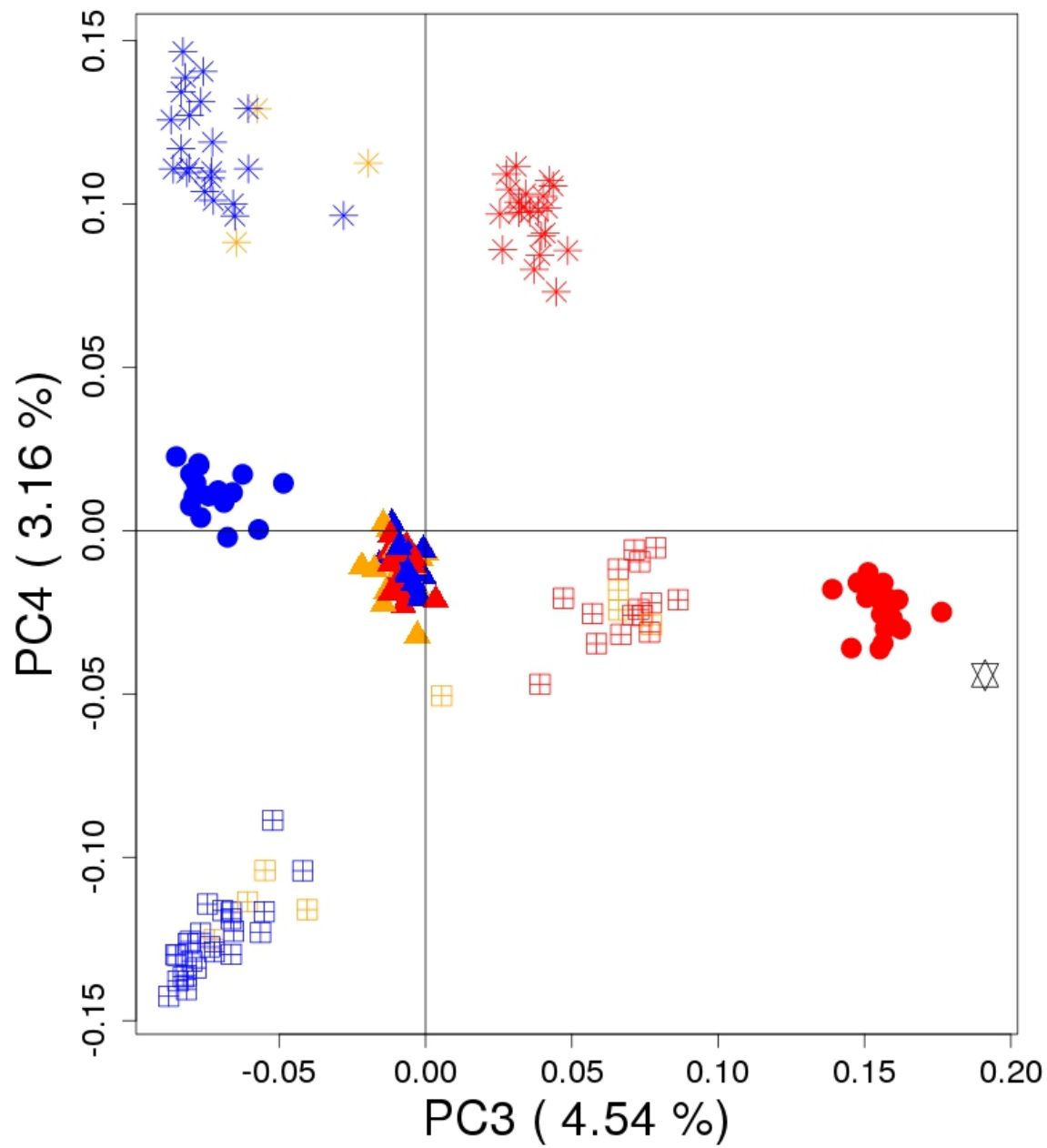
Meier *et al.* (2017) *MolEcol*



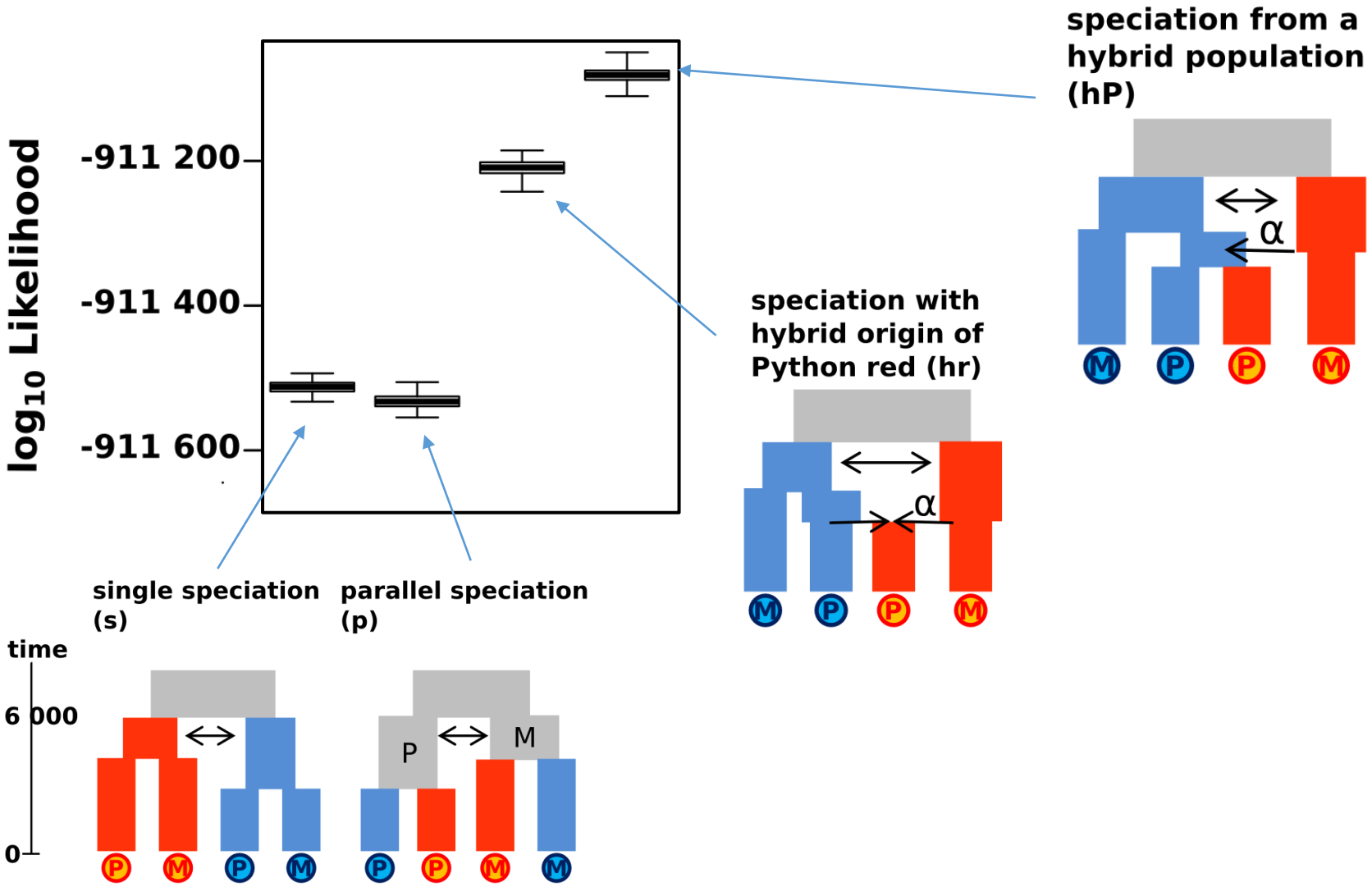





Makobe
Python
Kissenda
Luanso
insilico ref
red
blue
interm.
181 individuals
18341 SNPs
PC1 (8.52 %)
PC2 (5.94 %)
-0.10
-0.05
0.00
0.05
0.10
0.15
0.20

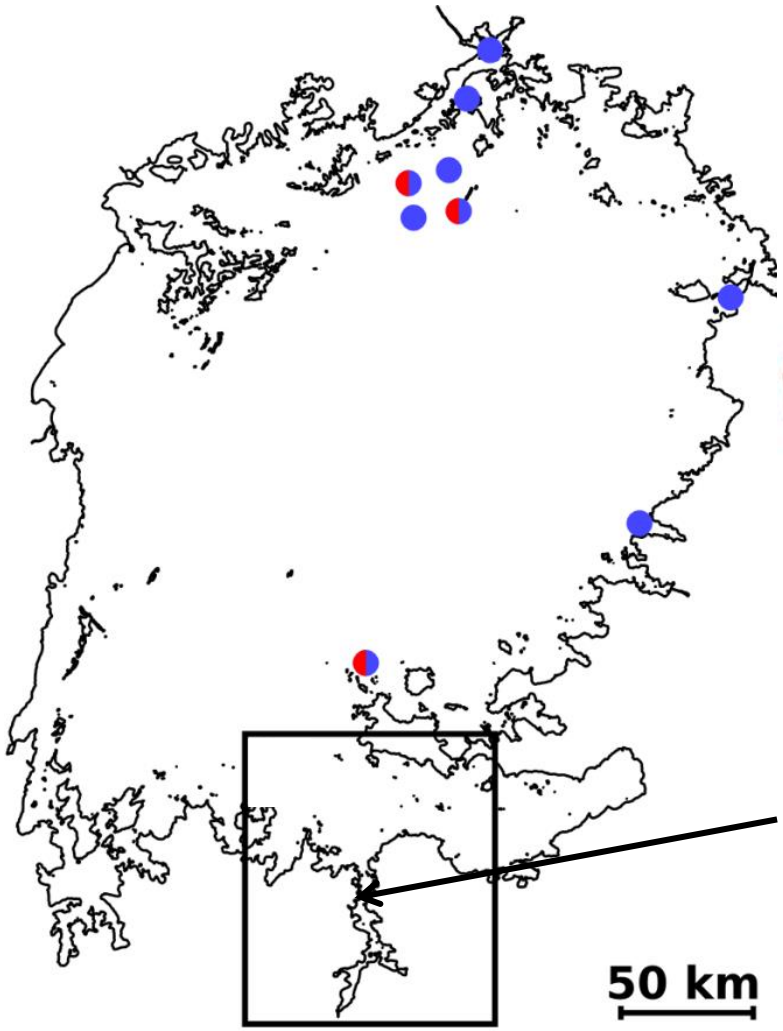

PC3 (4.54 %)
PC4 (3.16 %)
-0.15
-0.10
-0.05
0.00
0.05
0.10
0.15
0.20

Demographic modeling of whole genomes reveals speciation from a hybrid population in the Mwanza Gulf species pair

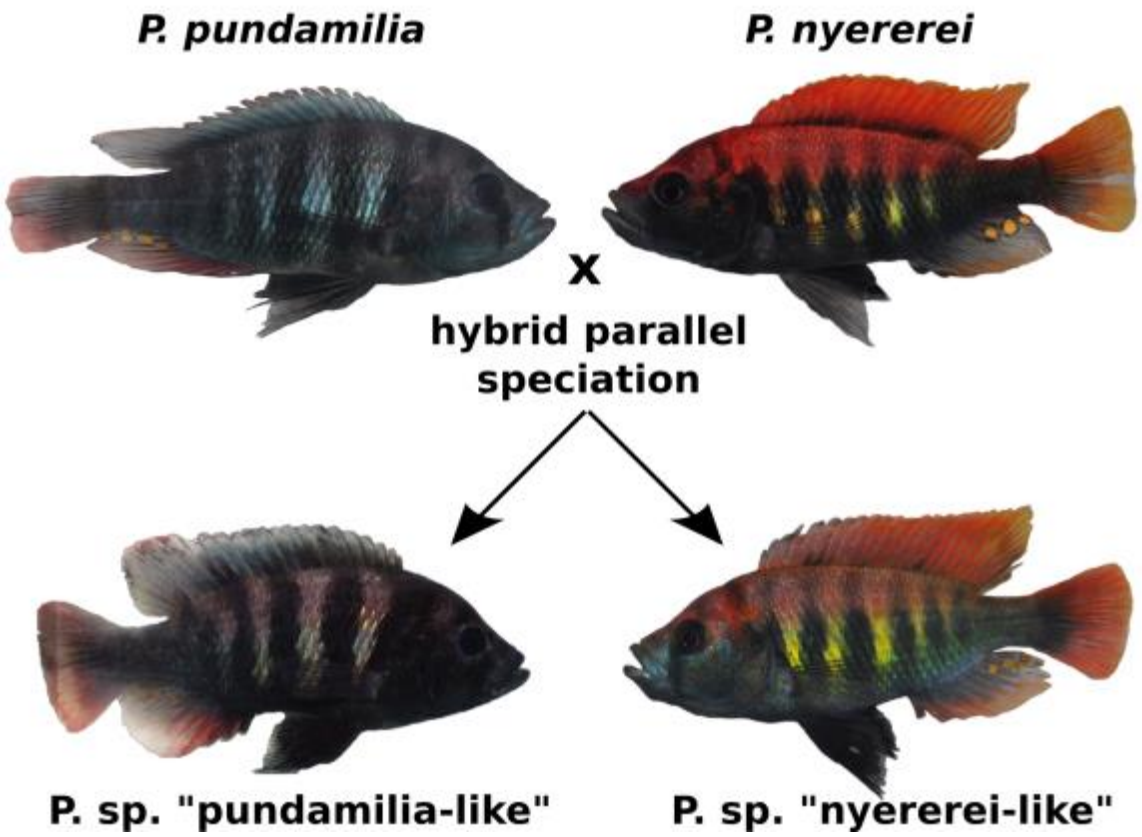


Meier *et al.* (2017) *MolEcol*

Recent hybrid parallel speciation



Mwanza Gulf

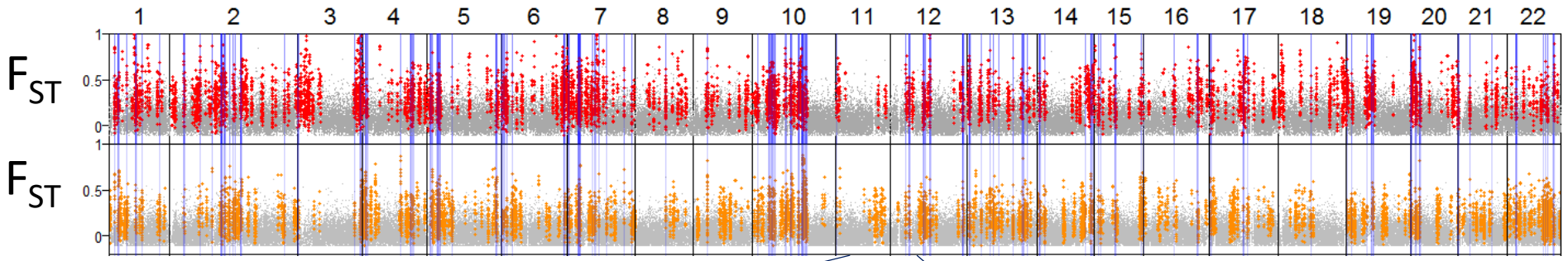


older original species pair

younger species pair of hybrid origin

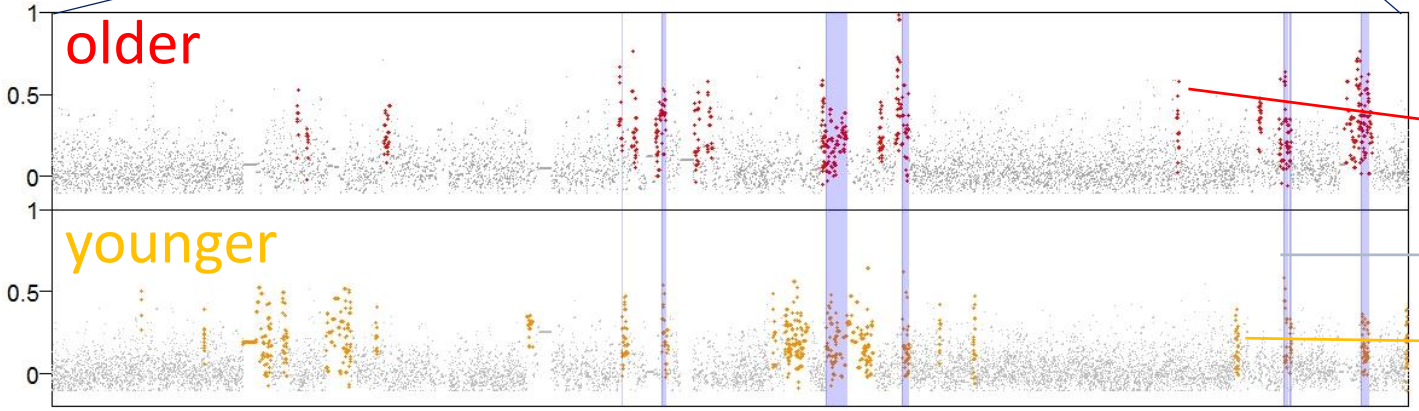
Meier *et al.* (2017) *MolEcol*

Many regions are highly differentiated between the species

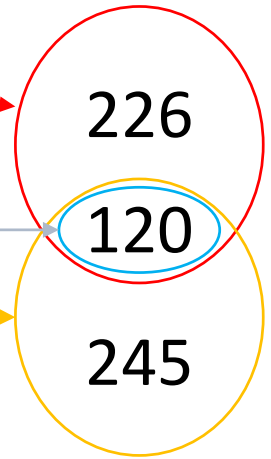


older pair

younger pair



1/3 of the highly differentiated regions are shared between the species pairs



highly differentiated regions in the older species pair

shared

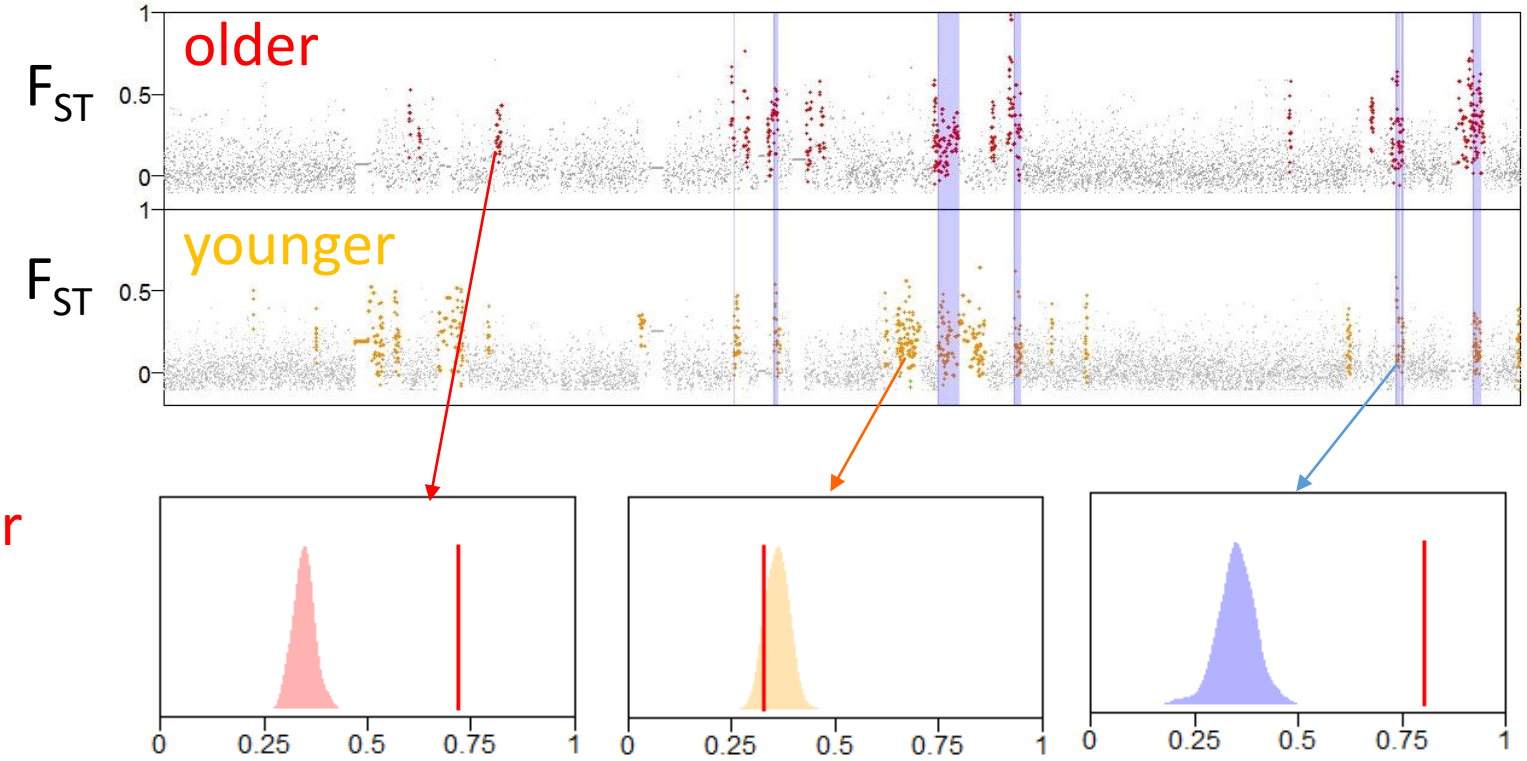
highly differentiated regions in the younger species pair

Meier *et al.* (2018) MBE

Enrichment of selection statistics support the action of selection

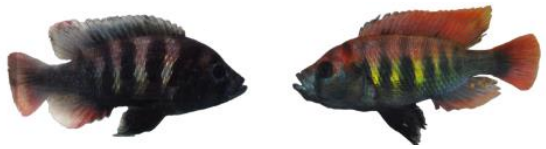
Selection statistics:

d_{xy}
Tajima's D
Δpi
XP-EHH
iHS



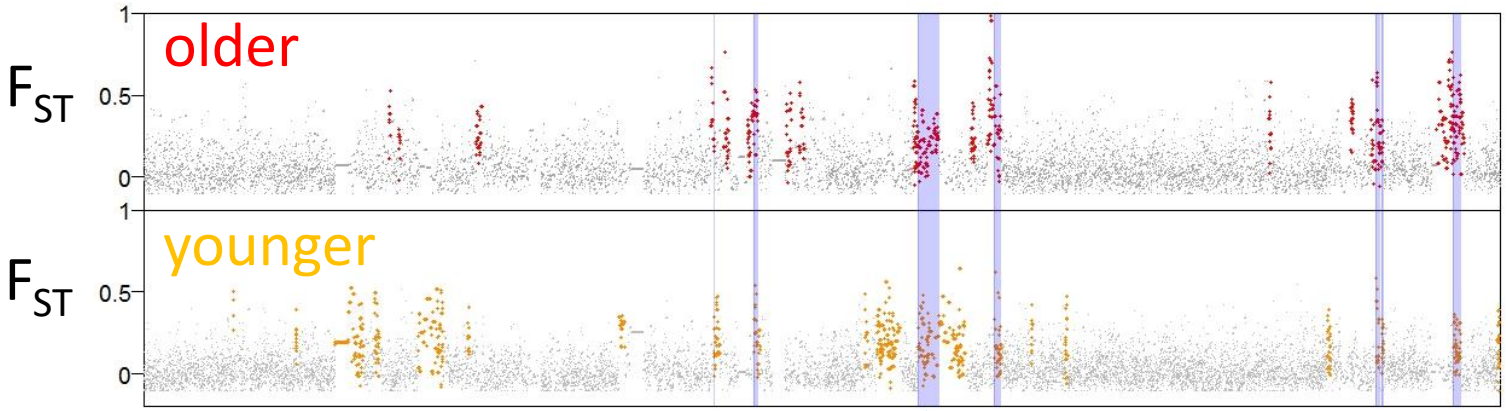
Selection in the older pair

Selection in the younger pair

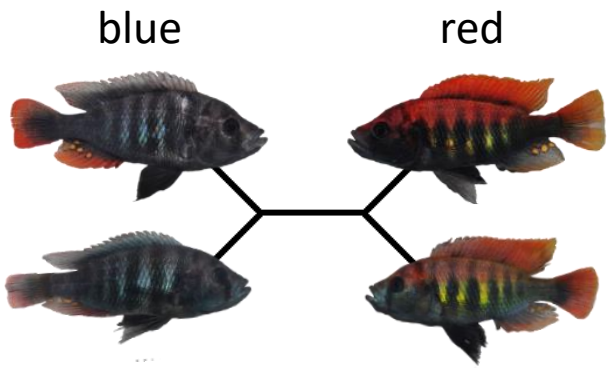


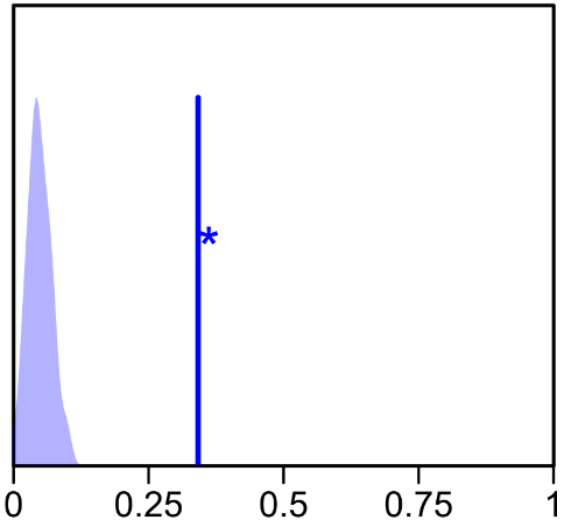
Meier *et al.* (2018) MBE

Highly differentiated regions shared by both species pairs show parallel allele frequency differences



Species group by color





%shared HDRs with color topology

TWISST
(Martin & Van Belleghem, 2017)

Sorting of admixture variation under parallel selection pressures