**Figure S1:** Population genetic structure analyses of the species used in this study for the Amazon, Doce, and São Francisco rivers. The studies and their respective species are shown on the left side of the figure. The left quadrant displays the results generated by the BAPS program, while the right quadrant shows the results from the DAPC program.
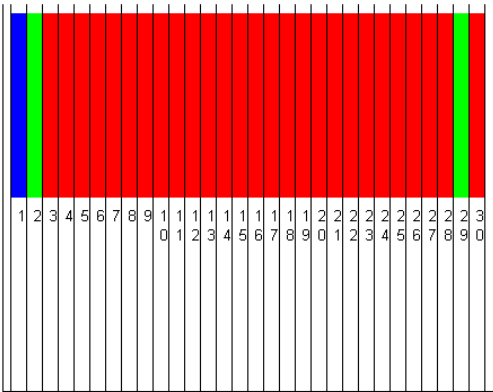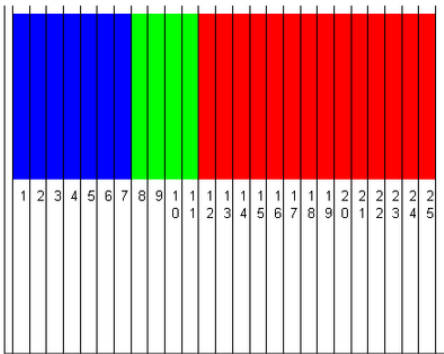
Population structure
Amazon river

Population structure
Amazon river

BAPS

DAPC
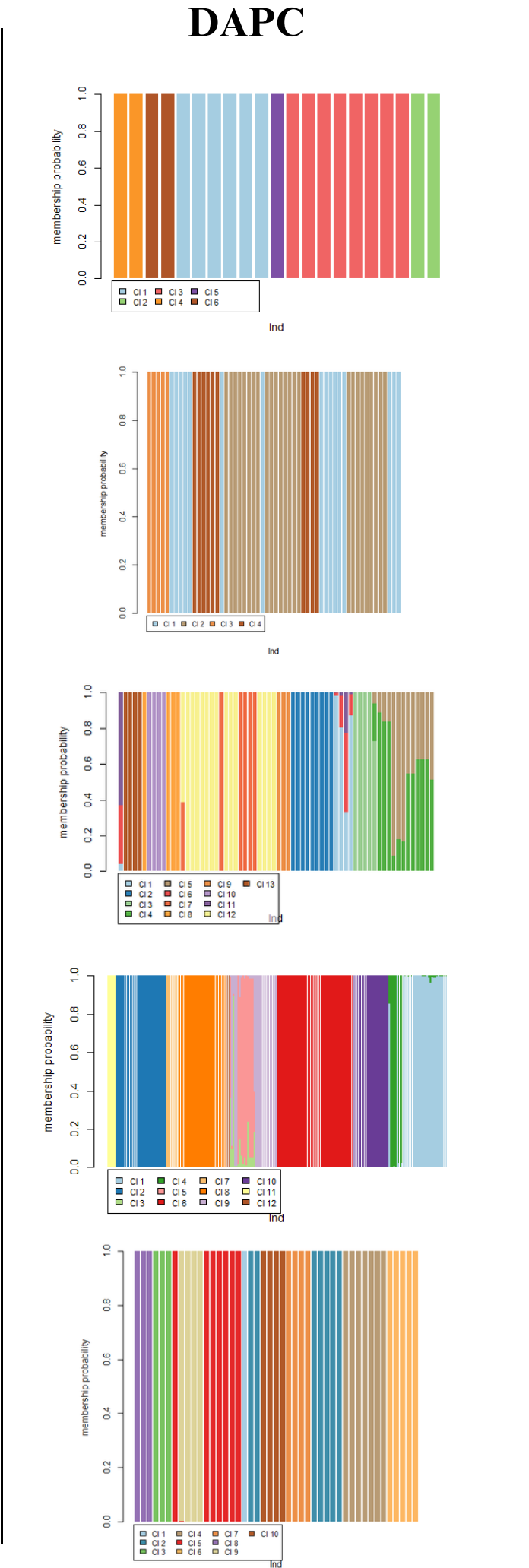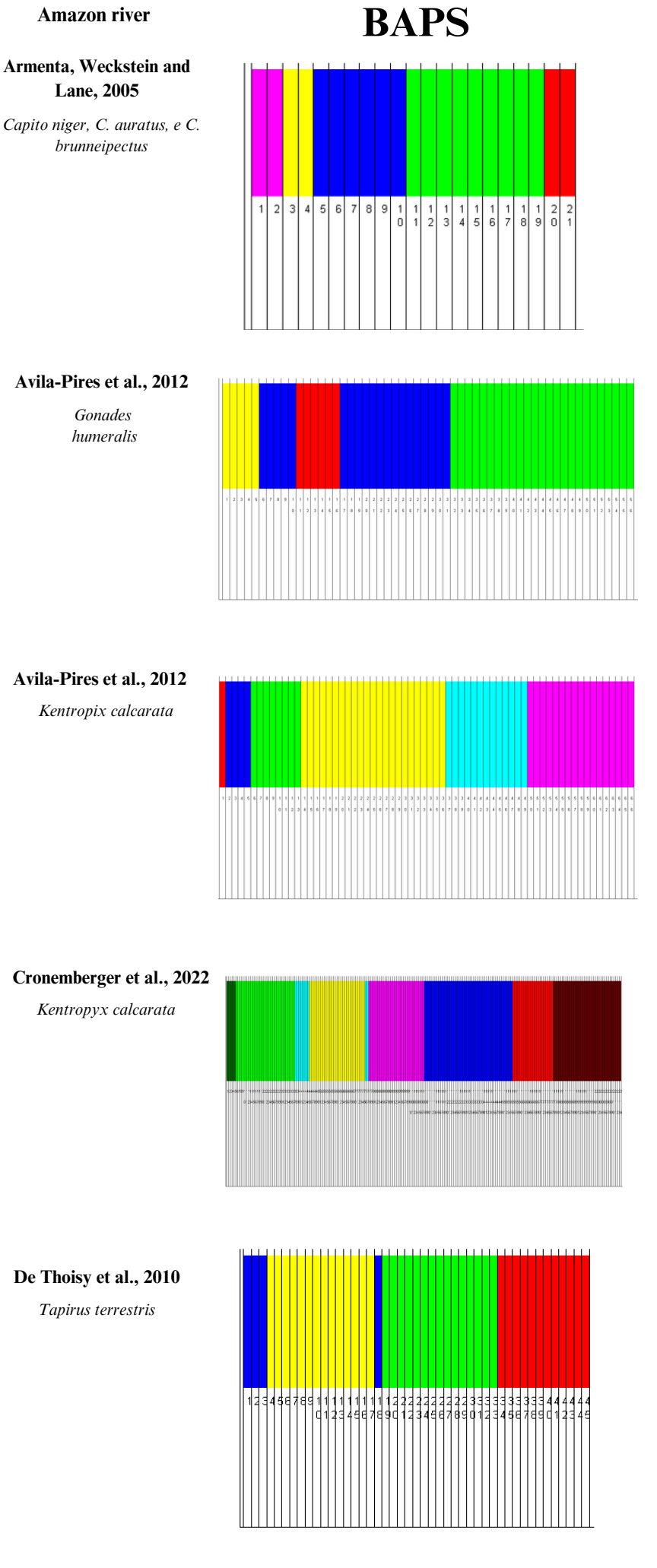
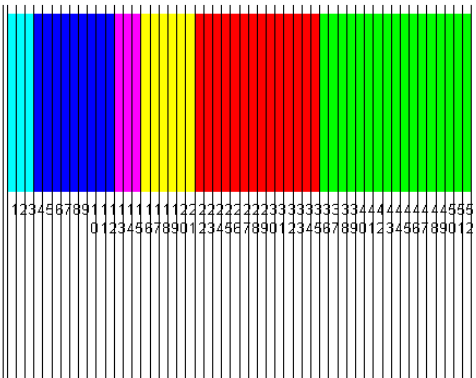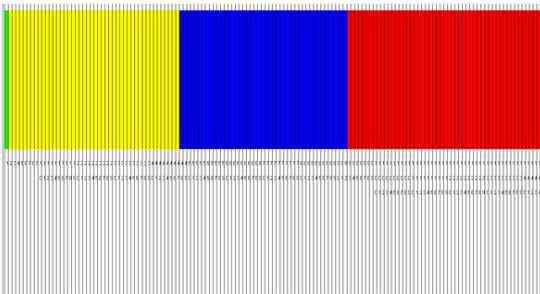**Eizirik et al., 2000**
Panthera onca

Fairley et al., 2002
Anopheles aquasalis

Gibbs et al., 2018
Bothrops atrox

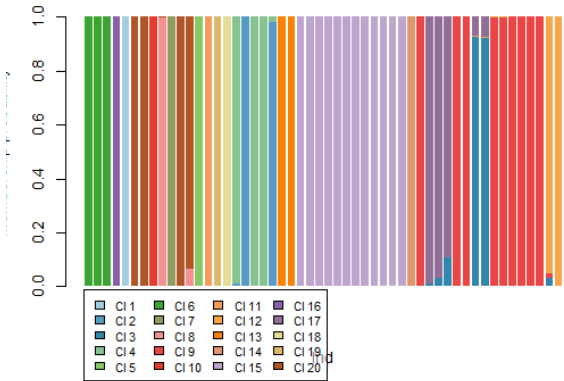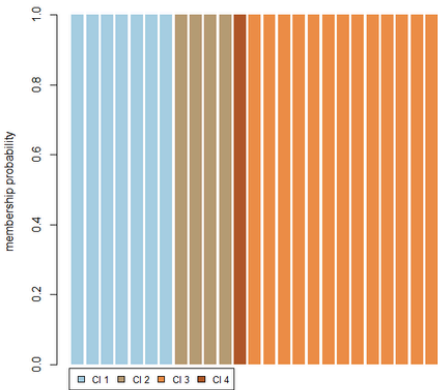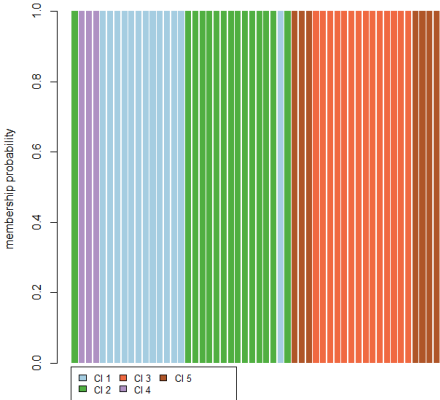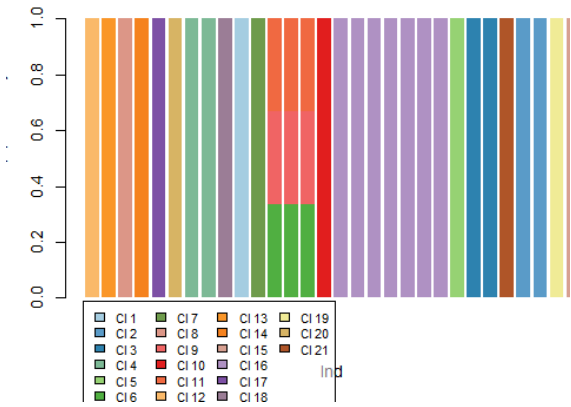**Guimarães et al., 2021**
Marmosops pinheiroi, M. woodalli and M. marina

Machado et al., 2019
Hylaeamys megacephalus

Population structure
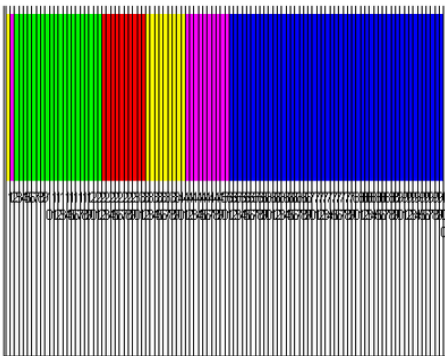## Amazon river

BAPS

DAPC
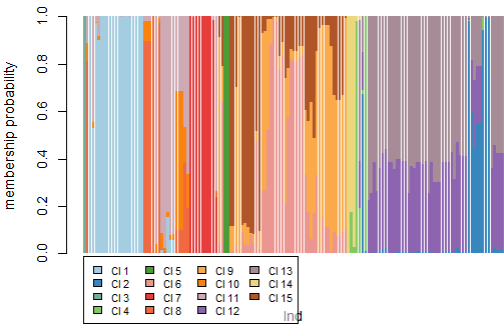
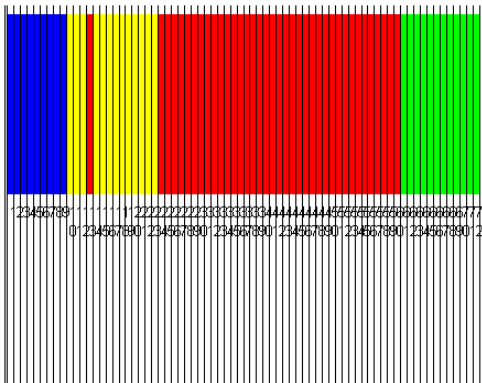**Marques-Souza et al., 2019**
Loxopholis osvaldoi
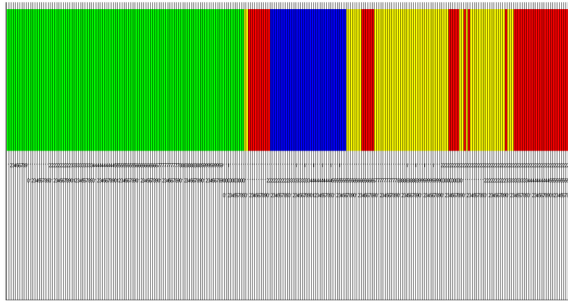
Moura et al., 2020
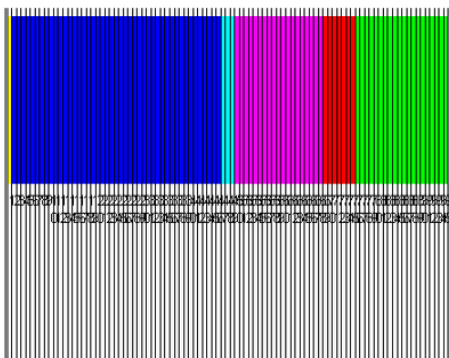*Arremon taciturnus taciturnus, Arremon taciturnus nigrirostris*
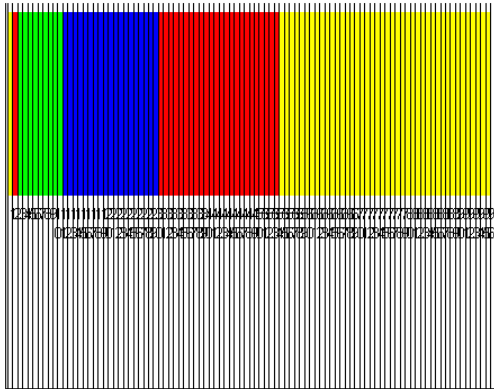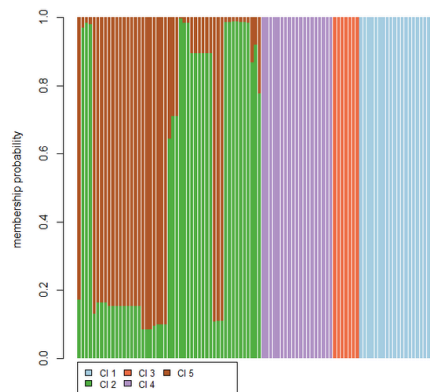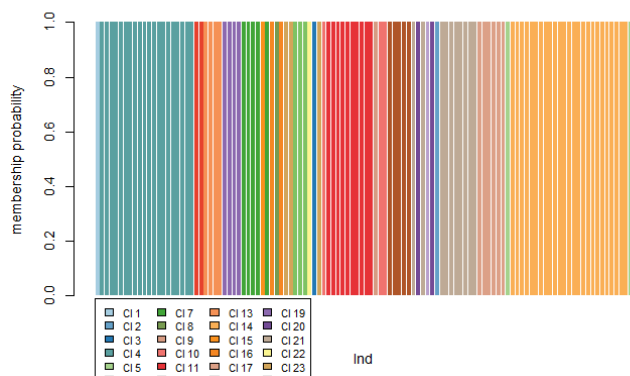
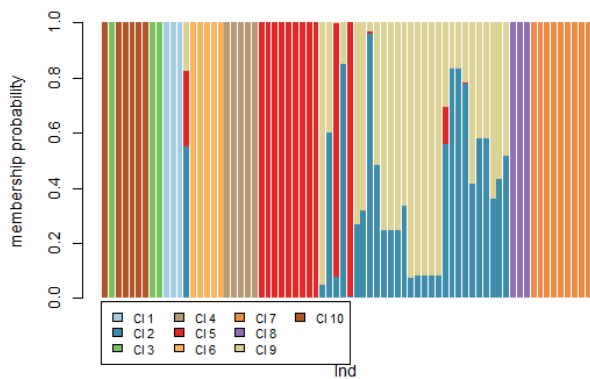**Pedro, Uezu and Sallum, 2010**
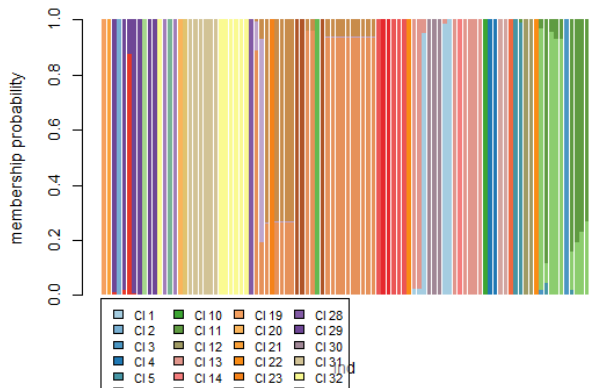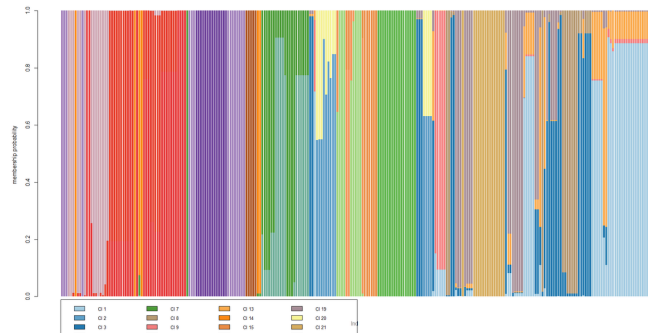*Anopheles triannulatus*

Pedro and Sallum, 2009
Anopheles darlingi

Santos et al., 2022
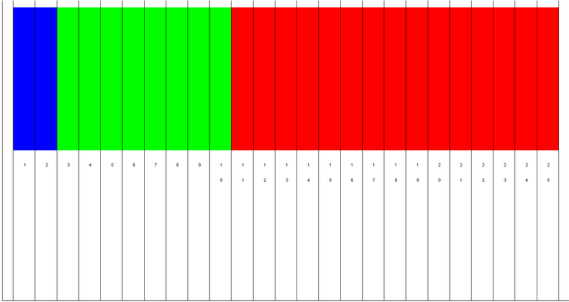*Uranoscodon superciliosus*

Population structure
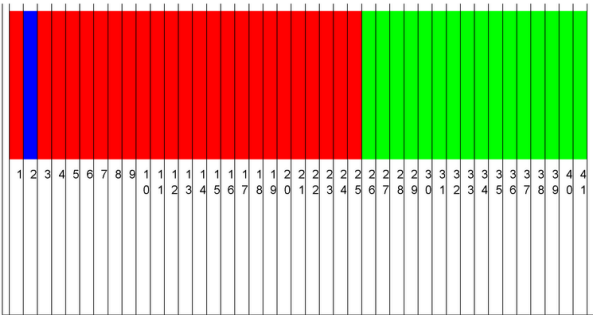## São Francisco river

BAPS

DAPC

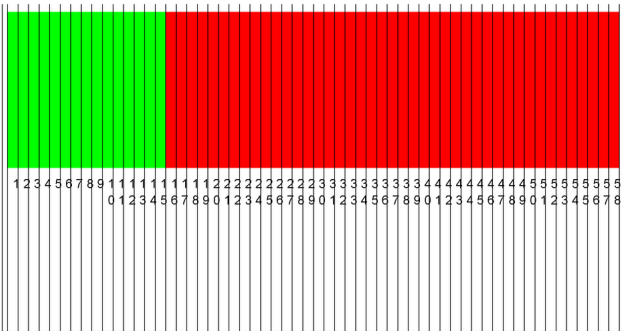**Corbett et al., 2020**
Phacellodomus rufifrons
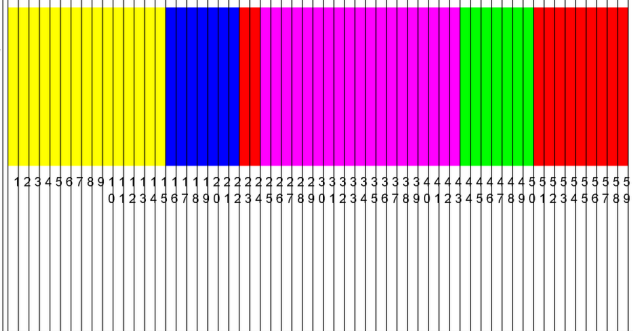
Coutinho-Abreu_et al., 2008
Lutzomyia longipalpis s.l.
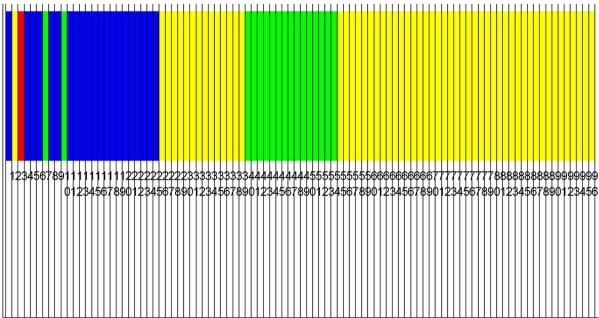
Di Nizo et al., 2024
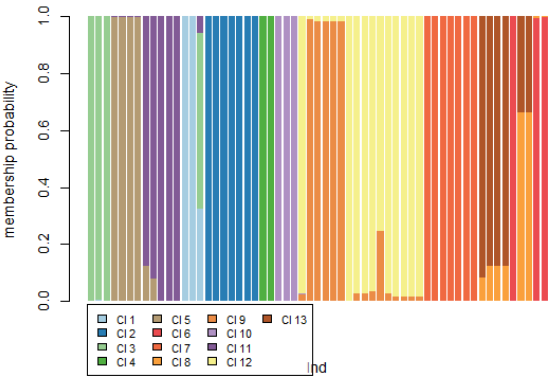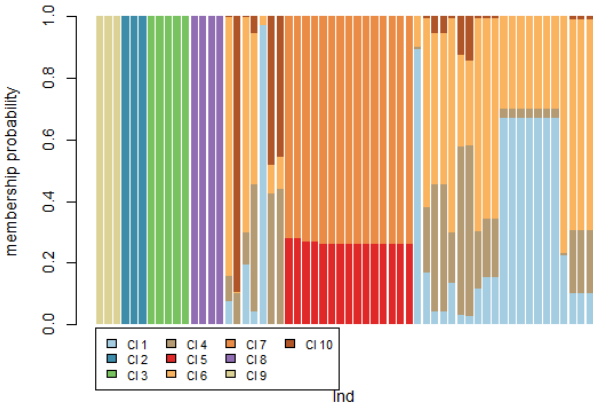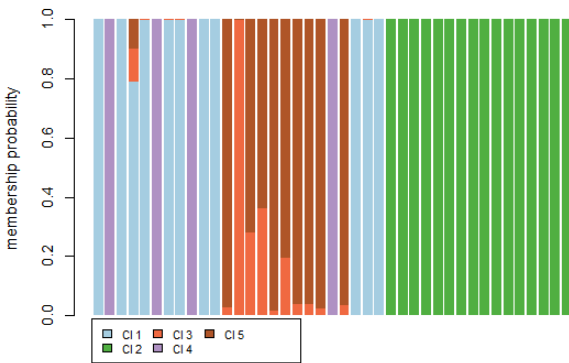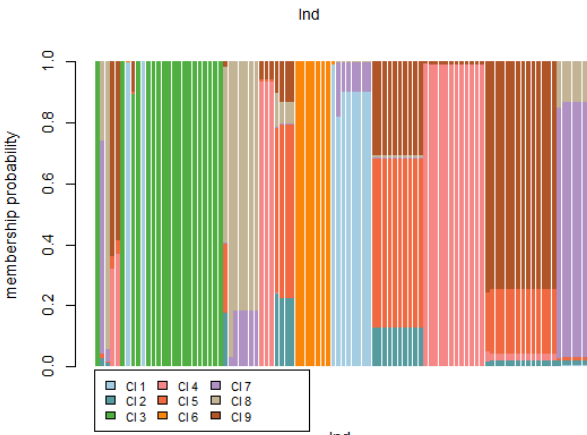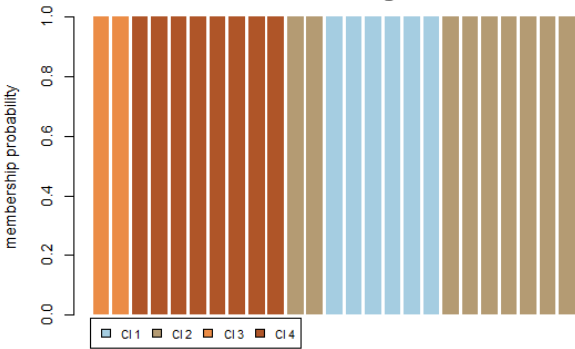*Wiedomys pyrrhorhinos, Wiedomys cerradensis*

Do Nascimento et al., 2011
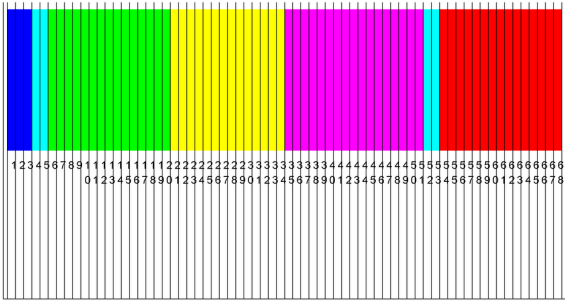*Bothrops atrox*

Faria_etal_2013
Gracilinanus agilis

Population structure
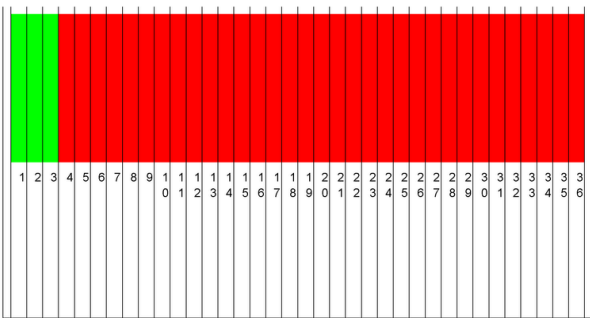**São Francisco river**

BAPS

DAPC

Fonseca et al., 2018
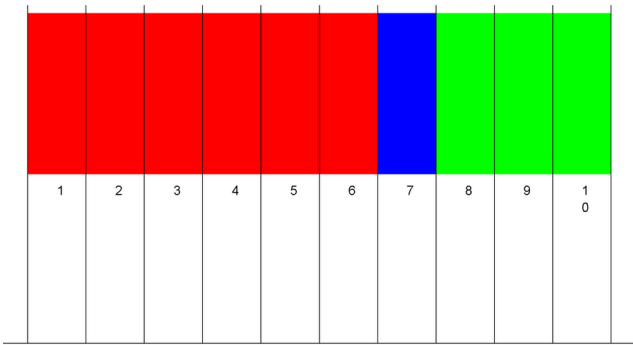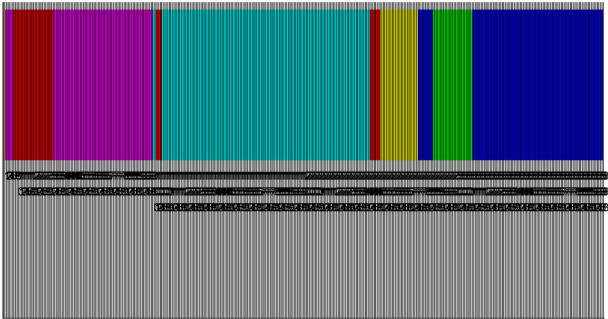*Phacellodomus rufifrons*

Nascimento et al., 2013
Thrichomys apereoides
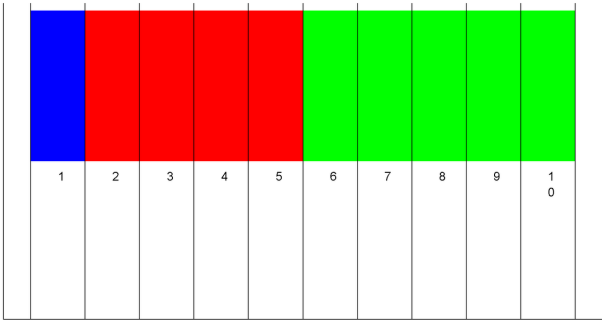
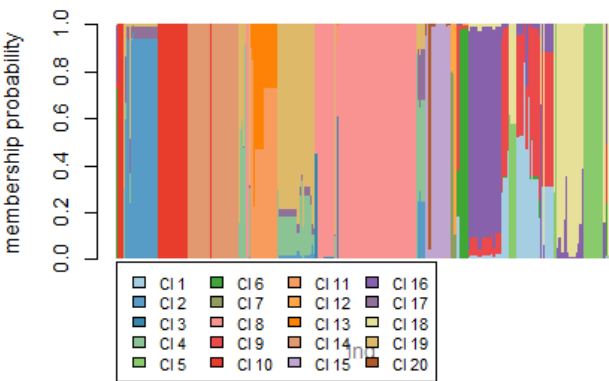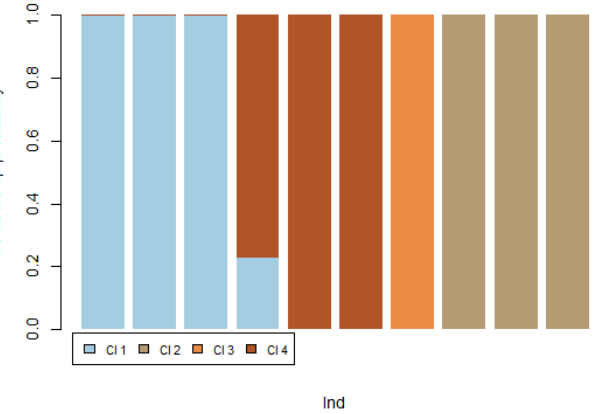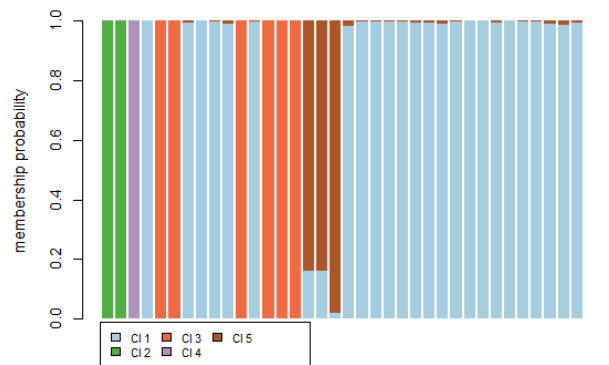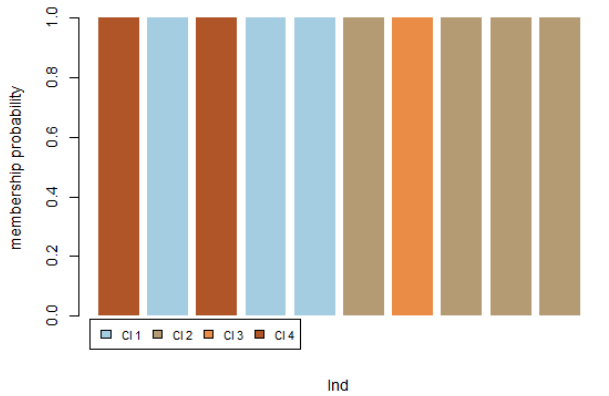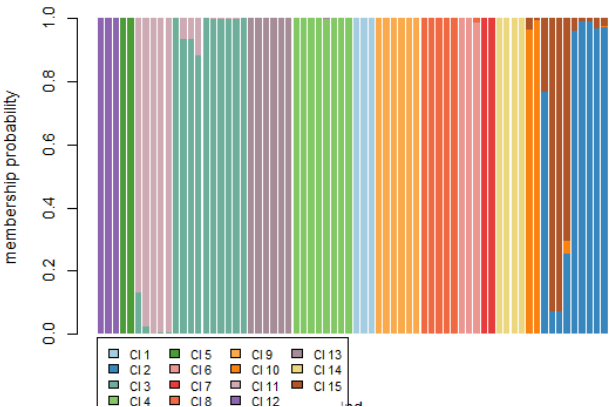**Nascimento et al., 2013**
Thrichomys laurentius

Nascimento et al., 2013
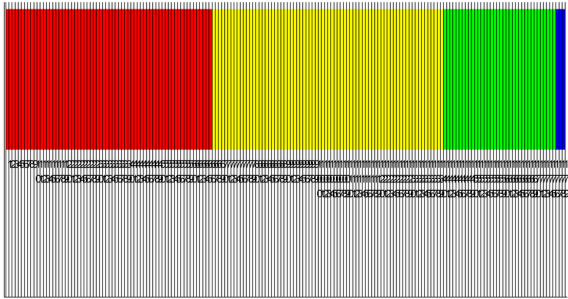*Thrichomys inermis*

Oliveira et al., 2015
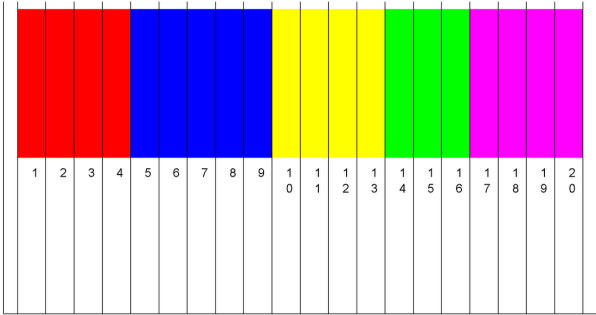*Cnemidophorus ocellifer*

Population structure
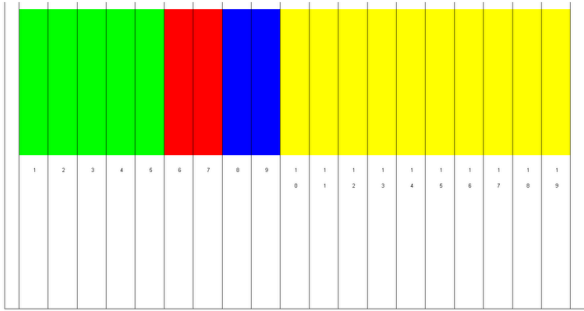## São Francisco river

BAPS

DAPC

Oliveira et al., 2018
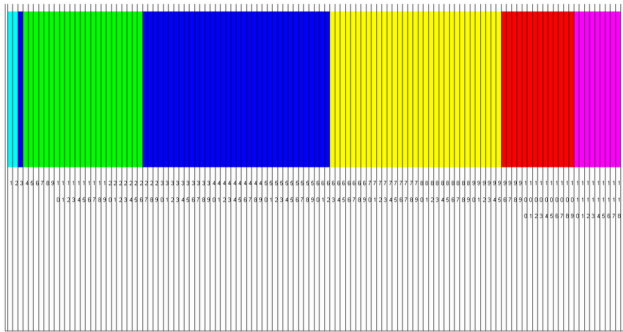
Dermatonotus muelleri

Passoni, Benozzati, Rodrigues and 2008

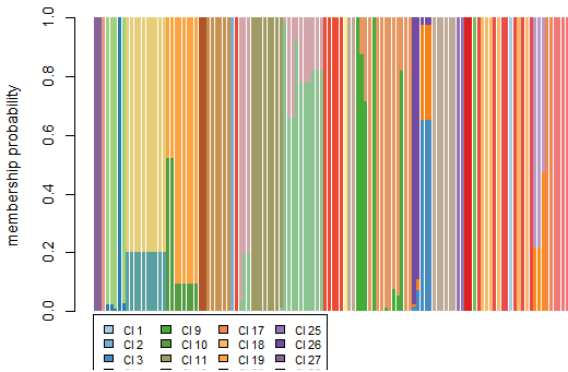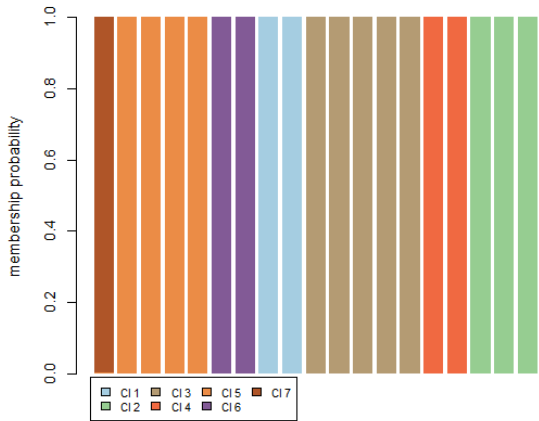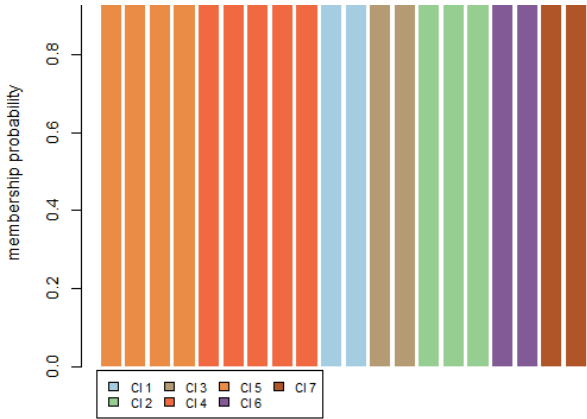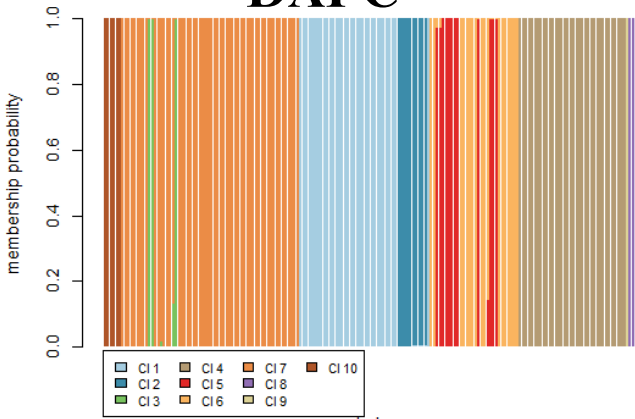*Eurolophosaurus divaricatus, Eurolophosaurus amathites, Eurolophosaurus nanuzae*

Siedchlag et al., 2010

Calyptommatus leiolepis

Werneck et al., 2015

Tropidurus semitaeniatus

Population structure
Doce river
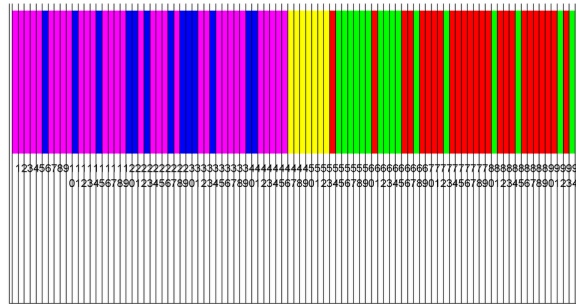
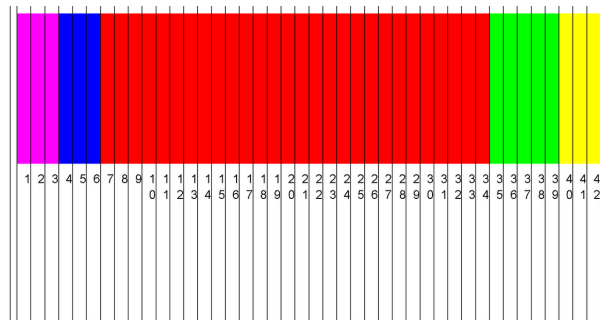|	**BAPS**	**DAPC**
Menezes et al., 2016 *Scinax eurydice*		
Pellegrino et al., 2005 *Gymnodactylus darwinii complex*		
Santos, Scherrer and Loss, 2018 *Miobantia fuscata*		