

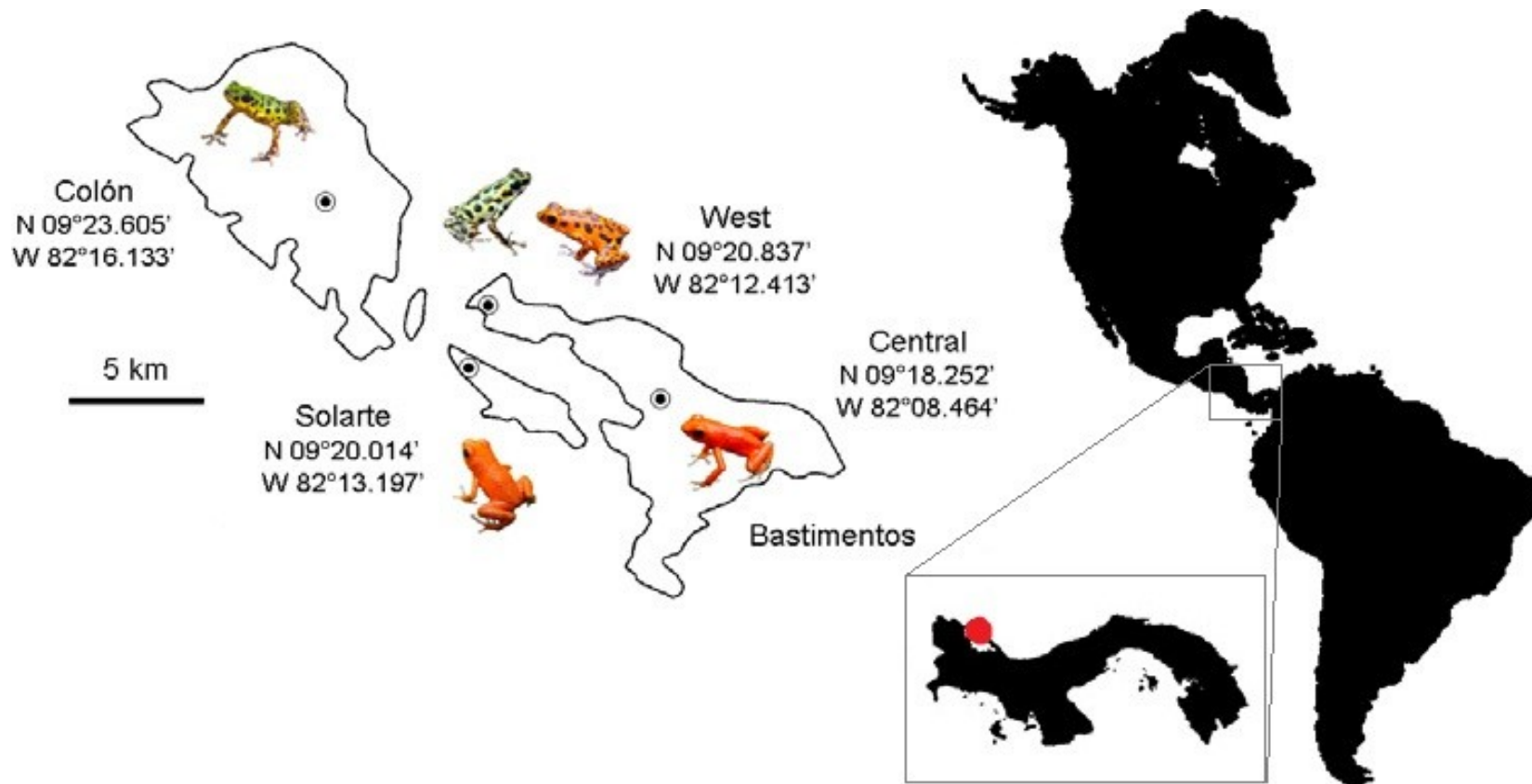
# The mechanism of speciation

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Sexual and natural selection  
of *Dendrobates pumilio*



# Sexual selection of *Dendrobates pumilio*



Picture: Archipelago „Bocas del Toro“ in Panama



# Sexual selection of *Dendrobates pumilio*



Picture left: Plasticine-modells of *Dendrobates pumilio*

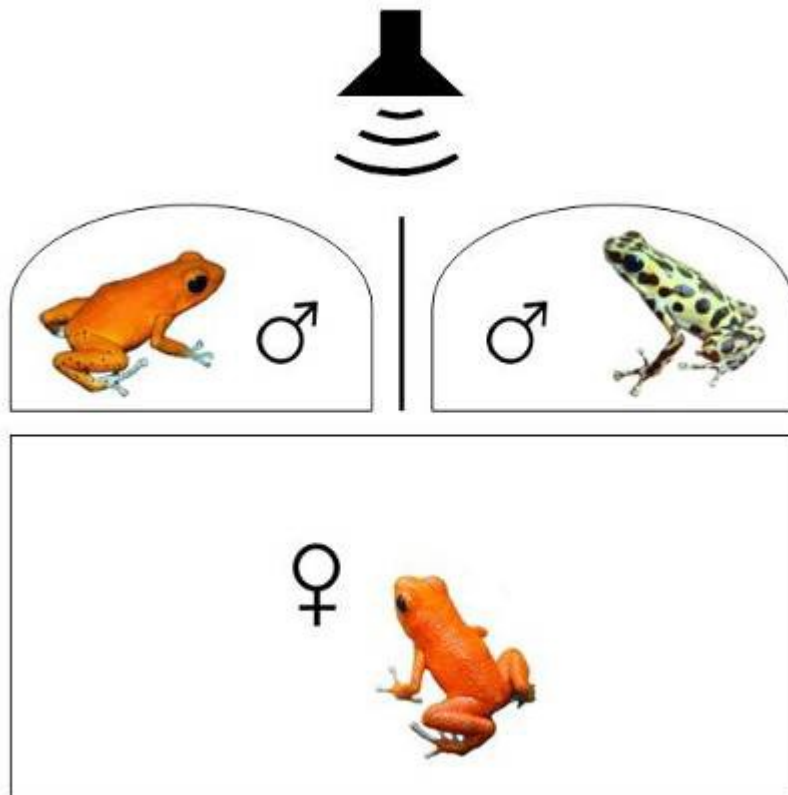


Picture top-right: Eggs of *D. pumilio*

Picture bottom-right:  
Frog with polliwog on his back



# Sexual selection of *Dendrobates pumilio*



## Experiment 1:

- Males from two different populations in glass case
- One call from speaker
- Female mate choice

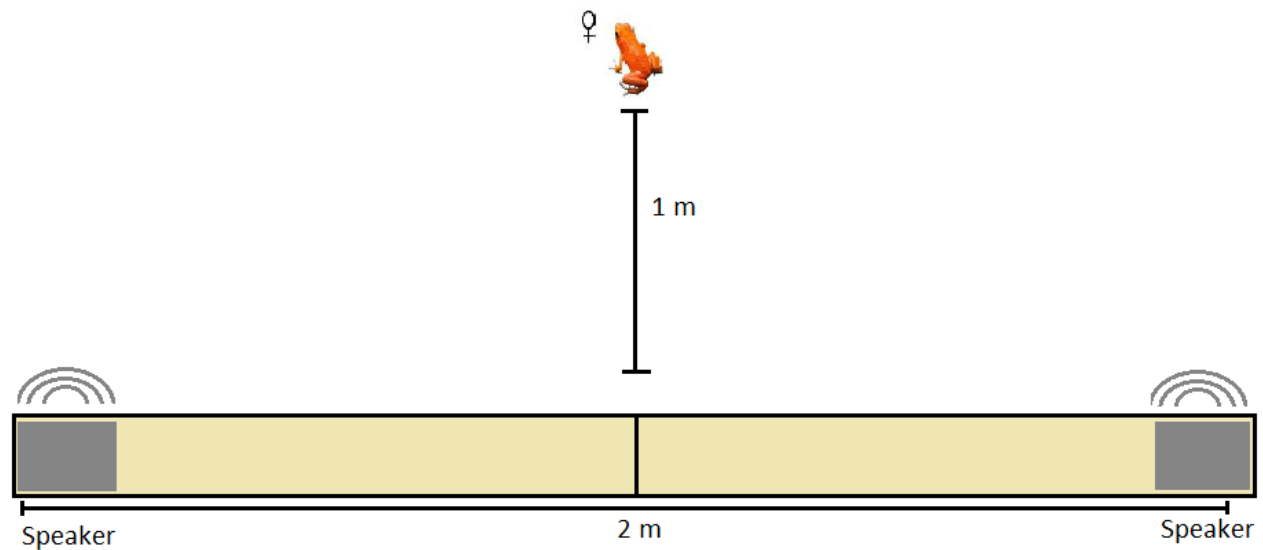


# Sexual selection of *Dendrobates pumilio*



## Experiment 2:

- Two different calls for mate choice
- Plasticine-models



A photograph of two bright orange frogs with black eyes and black spots on their backs, resting on a large green leaf. The frogs are positioned on either side of the title text.

# Sexual selection of *Dendrobates pumilio*

## Results

- Females prefer their similar phenotype
- Call is more important than color
- Natural selection and sexual selection lead to speciation without geographical isolation