

# BR-code: Vertebrates

*“A dynamic resource for profiling environmental DNA reference database accuracy and completeness”*

## Authors

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## Abstract

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# Over 75% percent of the world's food crops are dependent on pollinators to at least some d

**How to cite this:**

```
# this dynamic document directly: J. Reilly, A. Allen-Perkins, R. Winfree, I. Bartomeus. r s
#
# Or the original paper: TBA
```

## Download in PDF:

[https://github.com/ThomasLuypaert/BarcodeBrazil/Report\\_BarcodeBrazil.pdf](https://github.com/ThomasLuypaert/BarcodeBrazil/Report_BarcodeBrazil.pdf)

## Source code:

You can find the source code, as well as previous releases of this repository at: <https://github.com/ThomasLuypaert/BarcodeBrazil>

## Introduction

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## Methods

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### 1. Building barcode-specific reference databases

Several approaches and associated tools are available to build barcode-specific reference databases, including CRABS, rCRUX, RESCRIPT, METACURATOR, and ECOPCR, among other (sources). Previous work has demonstrated the

Here, we make use of CRABS and rCRUX to build custom reference databases for X commonly used vertebrate barcodes: (i) 12S MiMammal (source); (ii) 12S Riaz (source); (iii) some other barcode; (iv) a final barcode.

#### *CRABS reference database*

First, we retrieved sequencing data for each barcode from up to four online repositories: (i) National Centre for Biotechnology Innovation (NCBI - 12S MiMammal, 12S Riaz, more options here); Barcode of Life Data System (BOLD - options here); European Molecular Biology Laboratory (EMBL - options here); and the Mitochondrial Genome Database of Fish (MitoFish - 12S MiMammal, 12S Riaz). We fine-tuned our search to contain only relevant sequences using database-specific search queries (Table X).

These we supplemented by: ... MIDORI...

Table 1: **Table 1:**

Database	Search query	Explanation
NCBI	–database nucleotide –query '12S[All Fields] AND ("1"[SLEN] : "50000"[SLEN])'	Restricts the search to 12S sequences no longer than 50,000 bp.
BOLD	–database 'Actinoptery- gii Aves Mammalia Reptilia Amphibia'	Restricts the search to ray-finned fish, birds, mammals, reptiles and amphibians.
EMBL	–database 'vrt*'	Restricts the search to vertebrates.
MitoFish	No search query	Already restricted to mitochondrial sequences of fish species.

## PART2

## PART 3

### Results

#### 1) Question 1 ?

Observations here

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#### 2) Question 2?

**Fig 2:** Another caption

Some more text about observations here

**Fig 3:** Another caption

#### 3) Question 3?

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**Fig 4:** Another caption.

#### **4) Question 4?**

Some more supporting text.

**Fig 5:** Final caption

#### **What next?**

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#### **References**

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