

ARISE target list

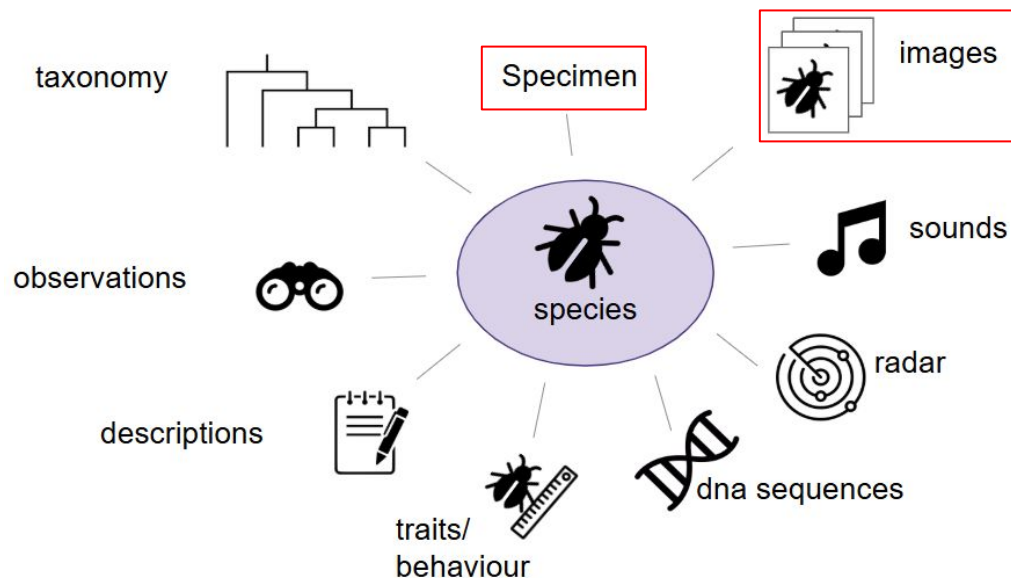
Onno Calf

iBOL Europe July 28, 2025



What is ARISE?

The ARISE project builds an infrastructure that will identify and monitor all multicellular species in the Netherlands



Goal team sampling

- Obtain and image 3 validated specimens of each species in the Netherlands



Teams

Onno



Lotte



Steering
Board

Programme
Management

Elaine



Emiel



Jessica



Apps

Monitoring
Demonstration
Sites

Sampling

Sample to
DNA ID

Biocloud

Sensor to
AI ID

Sequencing
Lab

Sequencing
Analysis

Digital Sp
ID



Kevin



Rutger



Jacob

Data & solution
architecture



Victor

The background of the slide is a grid of 100 small, clear petri dishes arranged in 10 rows and 10 columns. Each dish contains a single, small, dried insect specimen, likely for scientific study. The insects vary in size, shape, and color, including beetles, flies, and other arthropods. The text is overlaid on this grid.

So far, the sampling team has handled a total of

138.838

specimens!

Identify all species

An overview of the availability of DNA reference barcodes for all known Dutch species published in BOLD.

This information can be used to easily identify gaps in the Dutch DNA species reference barcode database.



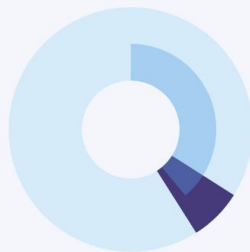
Animalia ⓘ

[View species](#)



Plantae ⓘ

[View species](#)



Fungi ⓘ

[View species](#)

● ARISE ● Other organizations ● Shared

Search

Recently viewed

Piersigia intermedia species >

Diaphana minuta species >

Apiloscatopse picea species >

Collect Samples & Metadata







Request Sampling Kit

Do you want to collect for Arise?

Name * Expertise *

Email *

Write a message



Collect Samples



Collect Metadata

< Add registration

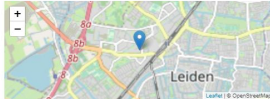
Step 2 of 5

Group/Project

Date and time*

Location with lat and long*

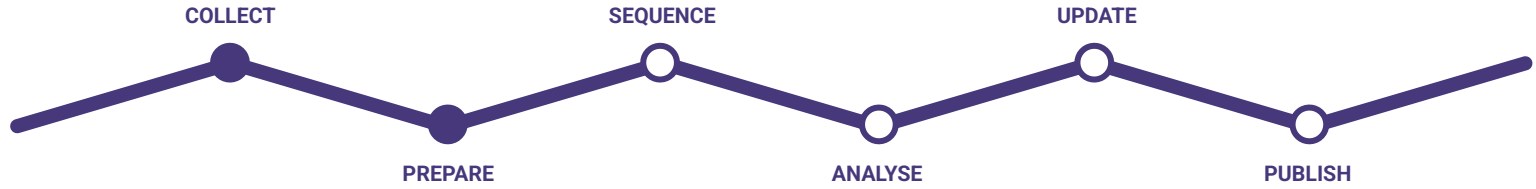
Place



Altitude (m)

Biotope

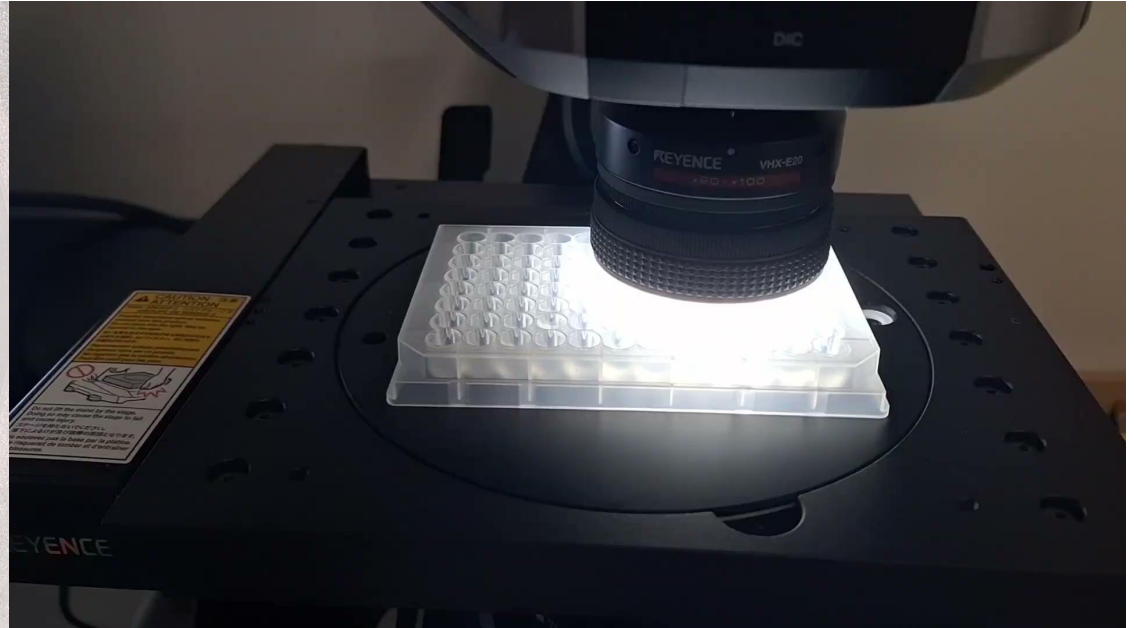
[Home](#) [Overview](#) [Wishlist](#)








Automate processes in the lab





DNA dashboard

ARISE ServicesNewsManage

Home

DNA Dashboard

Search


ID, species

Filters

Specimen ID	Status	ID by collector	Sequences	ID by analysis	Location
RMNH.ARA.4901	received	Acropora palmata	1		Kralendijk
RMNH.ARA.8372	received	Acropora cervicornis	1		Rincon
RMNH.ARA.7612	received	Dipturus laevis	1		Klein
RMNH.ARA.7126	received		2		Kralendijk
RMNH.ARA.1123	in lab	Hymenopora debilis	3		Rincon
RMNH.ARA.1253	in lab		3		Klein
RMNH.ARA.9876	in lab	Acropora palmata	2	Acropora palmata	Kralendijk
RMNH.ARA.7456	received	Dipturus laevis	2	Dipturus bullis	Bonaire
RMNH.ARA.2471	analyzed		1		Klein
RMNH.ARA.2345	analyzed	Hydrolagus alberti	1	Hydrolagus alberti	Kralendijk
RMNH.ARA.8234	received		1		Rincon
RMNH.ARA.2375	in lab	Phyllodoce erythrophylla	1		Klein
RMNH.ARA.1253	analyzed	Dipturus laevis	2		Bonaire
RMNH.ARA.9876	received		1		Klein
RMNH.ARA.7456	in lab	Hydrolagus alberti	1		Kralendijk
RMNH.ARA.2471	in lab	Phyllodoce erythrophylla	2		Bonaire

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ARISE ServicesNewsManage

Home > Sample: RMNH.ARA.4901

RMNH.ARA.4901

Specimen details

Mount: Wet specimen

Preserved part: Whole specimen

Preservation: Alcohol 96%

Sex: F

Life Stage: Adult

Container code: 735149546

Collection details

Date collected: 16/08/2023

Latitude: 52.1208

Longitude: 4.4234

Altitude: Min: 0 - Max: 23

Biotope: Saltwater

Country: The Netherlands

Province/State: Bonaire

Precise location: Kralendijk

Location remarks: Sed eu massa nisl. Ut ut dapibus risus, non commodo ligula. Mauris a sodales orci.

Taxonomy by collector

Collector: FirstName LastName

Rank: species

Name: Drosophila melanogaster

Sequences

Label: DJ490SK RMNH.6723 HEJ COI 5P

Last updated: 22/09/2023

➦


>DJ490SK RMNH.6723 HEJ COI 5P
AACATTATATATCATTTTGGTATATGATGGACCTCTCGGAAGCTGGGTTAAGTTTATTAATTCGGTTTGAAGTAGGGACAGCTGGTGACCTTTTGGTATGATGATCATTTTATAATGTAATCGTGAAGCTGCCATGCTTGGTAAATTTTTTTT
GTATGCCCCCTTAATTAATGGAGGGTTCCGGAATTAATGATGGTTCTCTCTATCGGGGCTCCAGACATAAGTTTCTCGAATAAATAATAGAGTTTGGCTATGCCCCCTCTTTATTTATATCTGCTCAACTCTAATGGAGGAG
GTGCTGGAAAGGGTGAAGTGTGTATCTCTCTCTCTGAGACCTATCGCTACAGGAGGGGCTTCGGTGATCTGGCTATTTTCTCTCAAGCTGGAGGTGGCTCTCTCTCTAGTGGATCAACTTTATACGACTATTTTAA*

Label: DJ490SK RMNH.6723 HEJ COI 5P

Last updated: 22/09/2023

➦

>DJ490SK RMNH.6723 HEJ COI 5P
AACATTATATATCATTTTGGTATATGATGGACCTCTCGGAAGCTGGGTTAAGTTTATTAATTCGGTTTGAAGTAGGGACAGCTGGTGACCTTTTGGTATGATGATCATTTTATAATGTAATCGTGAAGCTGCCATGCTTGGTAAATTTTTTTT
GTATGCCCCCTTAATTAATGGAGGGTTCCGGAATTAATGATGGTTCTCTCTATCGGGGCTCCAGACATAAGTTTCTCGAATAAATAATAGAGTTTGGCTATGCCCCCTCTTTATTTATATCTGCTCAACTCTAATGGAGGAG
GTGCTGGAAAGGGTGAAGTGTGTATCTCTCTCTCTGAGACCTATCGCTACAGGAGGGGCTTCGGTGATCTGGCTATTTTCTCTCAAGCTGGAGGTGGCTCTCTCTCTAGTGGATCAACTTTATACGACTATTTTAA*

DNA ServicesSensorsAlgorithmsDigital mediaAll tools

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dna.arise-biodiversity.nl



Target List

Status July 10, 2025

50.194 species in Dutch species register

- Updates required

43.092 species considered established

37.948 est. species **WANTED**

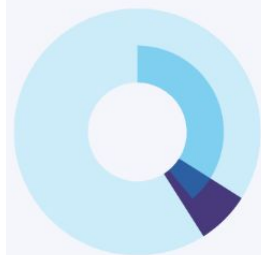
- **14.815** est. species without worldwide references (Prio1)
- **4.514** est. species <3 worldwide references (Prio2)
- **18.619** est. species with <3 Dutch references (Prio3)



Animalia 



Plantae 



Fungi 



So far, the sampling team has handled a total of

138.838

specimens!



We need expertise!

- **138.838** specimens collected
- **48.288** already have a barcode
- **~17.600** identified to **6.403** species
- **~121.250** specimens yet unidentified from bulk samples (BLAST-assisted identification)
- We need experts (YOU?) to collect, identify AND validate!
- Still **14.815** MOST WANTED species
(Established species without ANY published barcodes)

Group	MOST WANTED	Experts
Hymenoptera	1729	29
Arachnida	1261	6
Diptera	1135	44
Agaricomycetes	1107	16
Nematoda	661	2
Coleoptera	469	22
Trombidiformes	403	2
Rotifera	359	1
Hemiptera	327	6



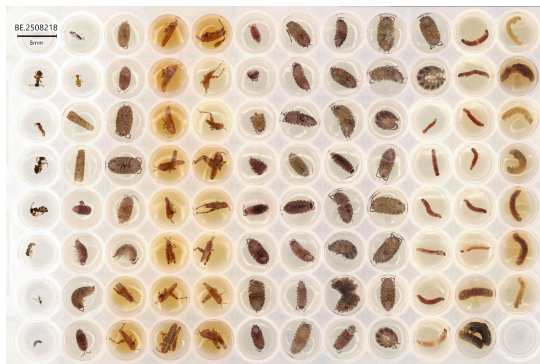
Filling the targetlist

- Collecting specimens from the field
- Collection mining
- Identifying bulk specimens
- Validate generated barcodes

Please reach out to us with recommendations
or anything else you want to share...

info@arise-biodiversity.nl





RMNH.ARA.4901

Specimen details		Collection details	
Mount:	Wet specimen	Date collected:	16/06/2023
Preserved part:	Whole specimen	Latitude:	52.2058
Preservation:	Alcohol 95%	Longitude:	4.8264
Sex:	♀	Altitude:	Mix 0 - Max 23
Life Stage:	Adult	Biotope:	Suburban
Collector code:	7214545	Country:	The Netherlands
		Province/State:	Bavaria
		Province location:	Frankenwald
		Location remarks:	Not far from road, lot of light blue flies, non commercial lights, Mixture of sodas and...

Taxonomy by collector

Collector:	Fishbone Lacharme
Rank:	Species
Name:	Drosophila melanogaster

Sequences

Label: DJ4905K RMNH.6723 HJ COI SP
last updated 22/09/2023

Label: DJ4905K RMNH.6723 HJ COI SP
last updated 22/09/2023

