



Physaria

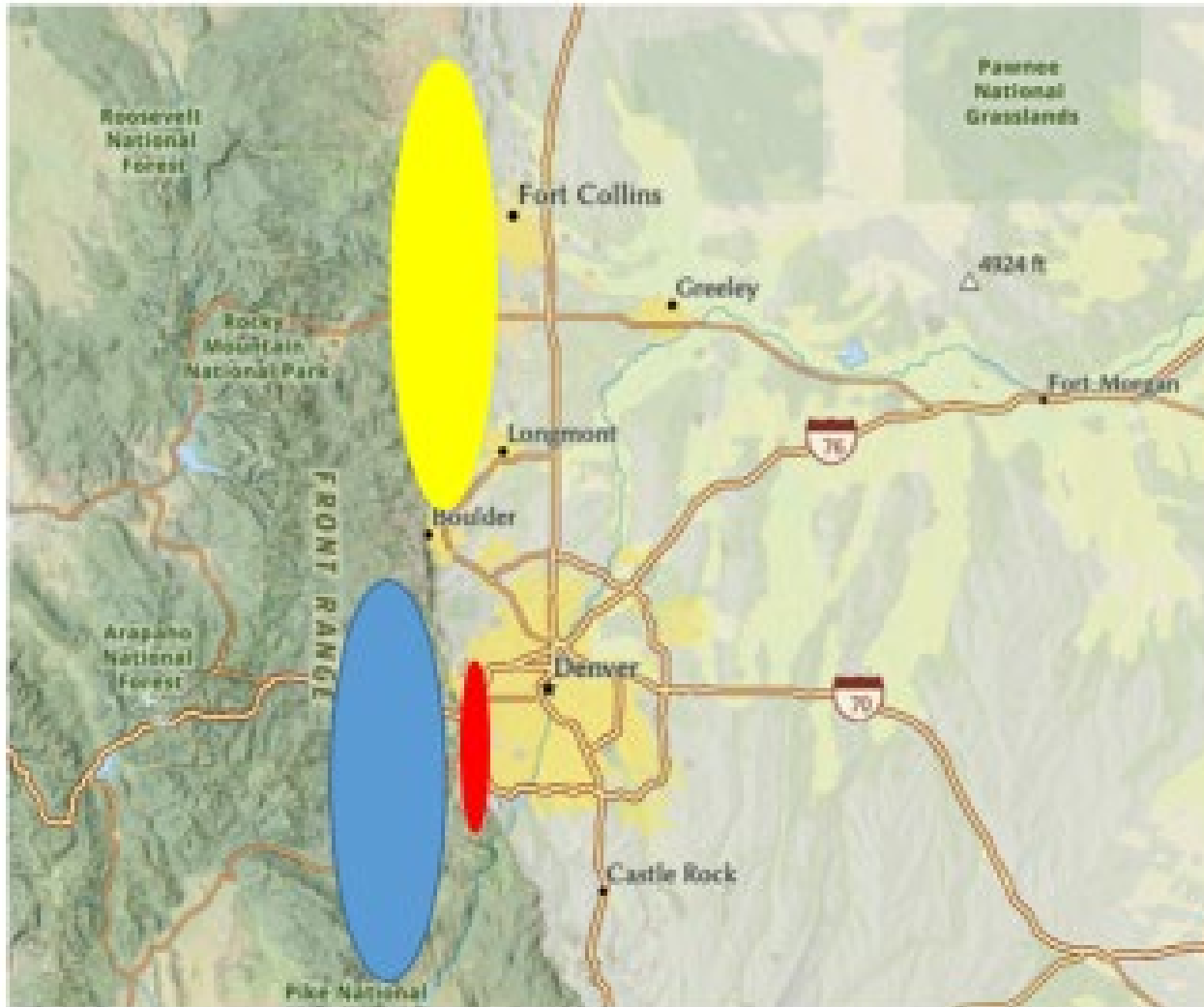
The Mystery of the Misidentified
Mustard

Physaria Project Partners

- Colorado Natural Heritage Program
- Denver Botanic Gardens
- University of Northern Colorado
- Colorado Native Plant Society
- Ken Caryl Ranch
- Jefferson County Open Space
- City of Boulder Open Space
- City of Fort Collins Natural Areas Department







Physaria bellii

Physaria vitulifera

Physaria x1



Survey123 Collection Form

Physaria Speciation Project 2022

Site Details

Population Size Estimate
Estimate population size of Physaria at site.
 1-5 5-10 10-20 20-50 50-100 >100

General Vegetation Description
What is the vegetation type where collections are occurring?

Associated Plants
Any plants species associated to the site?

Site Soil Collected *
Was soil collected?
 Yes No

Soil Type

General Soil Description

▼ Site Landscape Photos

North Photo

East Photo

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Physaria Speciation Project 2022

Fruit Description
Please describe the fruit morphology.

Leaf Shape Description
Please describe the leaf shape.

Voucher Collected
Was a voucher taken?
 Yes No

Collection Aspect
General aspect where the collection was taken.

Collection Slope
General slope where the collection was taken.

Specimen Photo

Specimen Photo 2

Latitude / Longitude
Geopoint where specimen was collected.

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Physaria bellii

Leaves not incised
Fruit smooth





Physaria vitulifera

Leaves incised

Fruit somewhat wrinkly





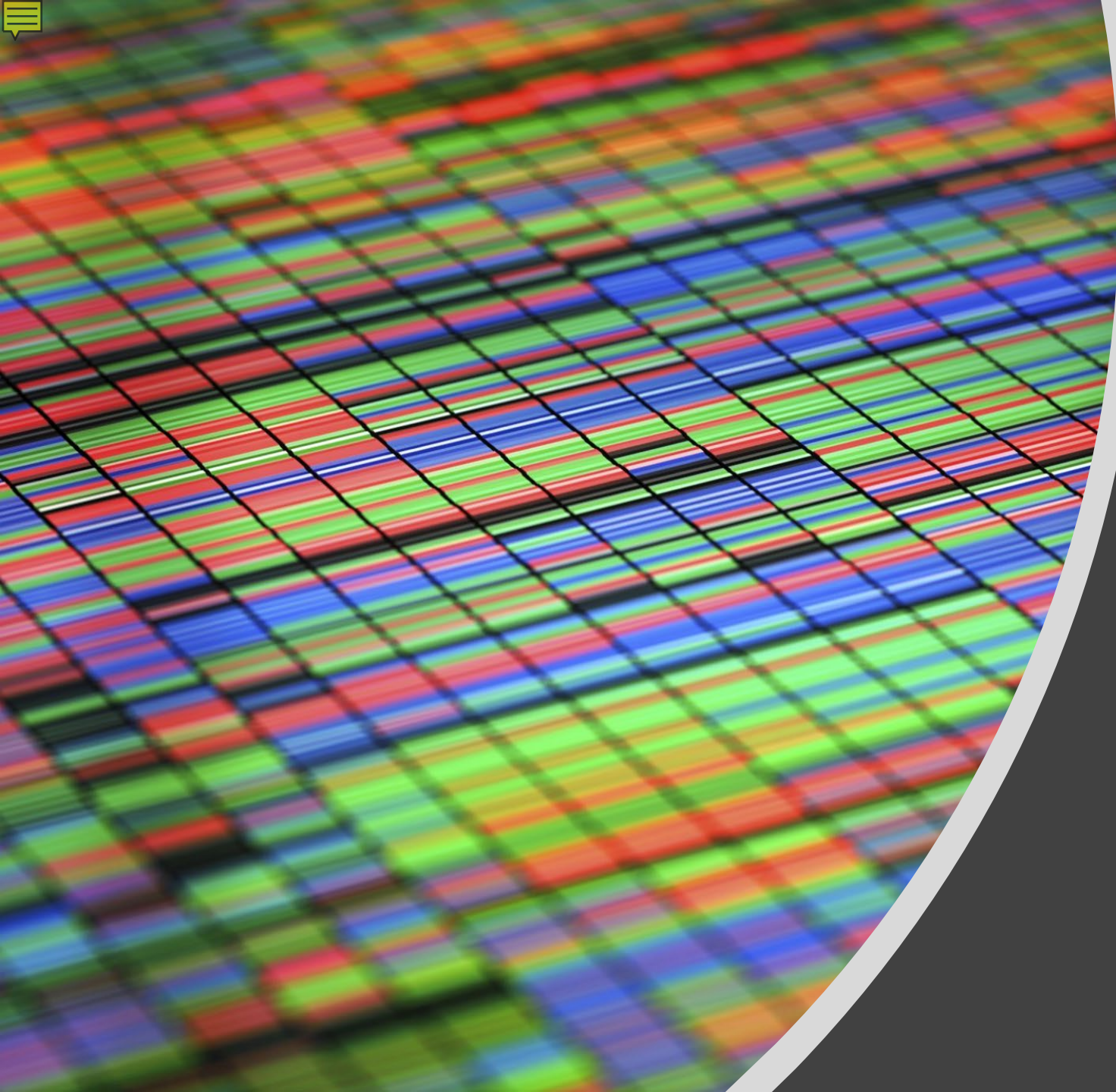
Physaria ?



Methods

- ❖ Field collect soil
 - Selective differences in soil type
- ❖ Field leaf tissue
 - Genetic analysis of taxonomy





Next Generation DNA Sequencing (NGS) - RADseq

- Fine-scale determination of genetic relatedness
- Hybridization
- Population level diversity

