



**Meise
Botanic Garden**

Semantic enrichment of collector information

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CETAF / ISTC Meeting 13/ 14 Feb 2019



Methodology

- ▶ Technician links internal CMS collector IDs to URIs from different web sources
 - Harvard, WikiData, VIAF, ORCID
- ▶ Start with IDs linked to the most specimens
 - Long tail of names with only a few specimens linked to them
 - Some of these might still be very interesting to link
- ▶ Implement into RDF on virtual herbarium



Meise virtual herbarium

Botanical collections

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ANNOTATE SPECIMEN

Pennisetum longistylum Hochst. ex A.Rich.

Cite as: <http://www.botanicalcollections.be/specimen/BR0000008367518>

Specimen



Herbarium Botanic Garden Meise

Barcode BR0000008367518

Type isotype

Country Ethiopia

prope Adoam

Date 1837-09-30

Collector Schimper W.G.

Collector number 65



<> RDF

Image



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DOWNLOAD (HIGH RESOLUTION)

ZOOM IN

Locality



Identification

Name *Pennisetum longistylum* Hochst. ex A.Rich.

Genus *Pennisetum*

Family Gramineae

Associated material

Kind of specimen herb. specimen

Herbarium Botanic Garden Meise

Specimen 318156



Meise Botanic Garden

www.botanicalcollections.be

RDF available

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Example of enriched RDF

```
<rdf:RDF
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  xmlns:rdf="http://www.w3.org/1999/02/22-rdf-syntax-ns#"
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  xmlns:dwc="http://rs.tdwg.org/dwc/terms/"
  xmlns:dwciri="http://rs.tdwg.org/dwc/iri/" >
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    <owl:sameAs rdf:resource="https://viaf.org/viaf/13080700"/>
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    <dc:created>Thu Feb 07 11:07:03 UTC 2019</dc:created>
    <dc:creator>Botanic Garden Meise</dc:creator>
    <dc:subject rdf:resource="http://www.botanicalcollections.be/specimen/BR0000008452061"/>
  </rdf:Description>
  <rdf:Description rdf:about="http://www.botanicalcollections.be/specimen/BR0000008452061">
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    <dwc:family>Ulmaceae</dwc:family>
    <dwc:informationWithheld>location information,determination details,habitat,georeferencing</dwc:informationWithheld>
    <dwc:typeStatus></dwc:typeStatus>
    <dwc:recordNumber>s.n.</dwc:recordNumber>
    <dwc:year>1854</dwc:year>
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    <dc:title>Trema orientalis (L.) Blume</dc:title>
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    <dwc:countryCode></dwc:countryCode>
    <dwc:month>07</dwc:month>
    <dc:created>1854</dc:created>
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    <dwc:InstitutionCode>Botanic Garden Meise</dwc:InstitutionCode>
    <dwc:country></dwc:country>
    <dc:rightsHolder>Agentschap Plantentuin Meise</dc:rightsHolder>
    <dwc:catalogNumber>BR0000008452061</dwc:catalogNumber>
    <dwc:recordedBy>Schimper W.G.</dwc:recordedBy>
```



Applications

- ▶ Merge different enrichment endeavors, link other web sources
→ e.g. ISNI
- ▶ Validate specimen data to collector biographical data (e.g. collection dates)
- ▶ Easier localization of (type) specimens from certain collectors

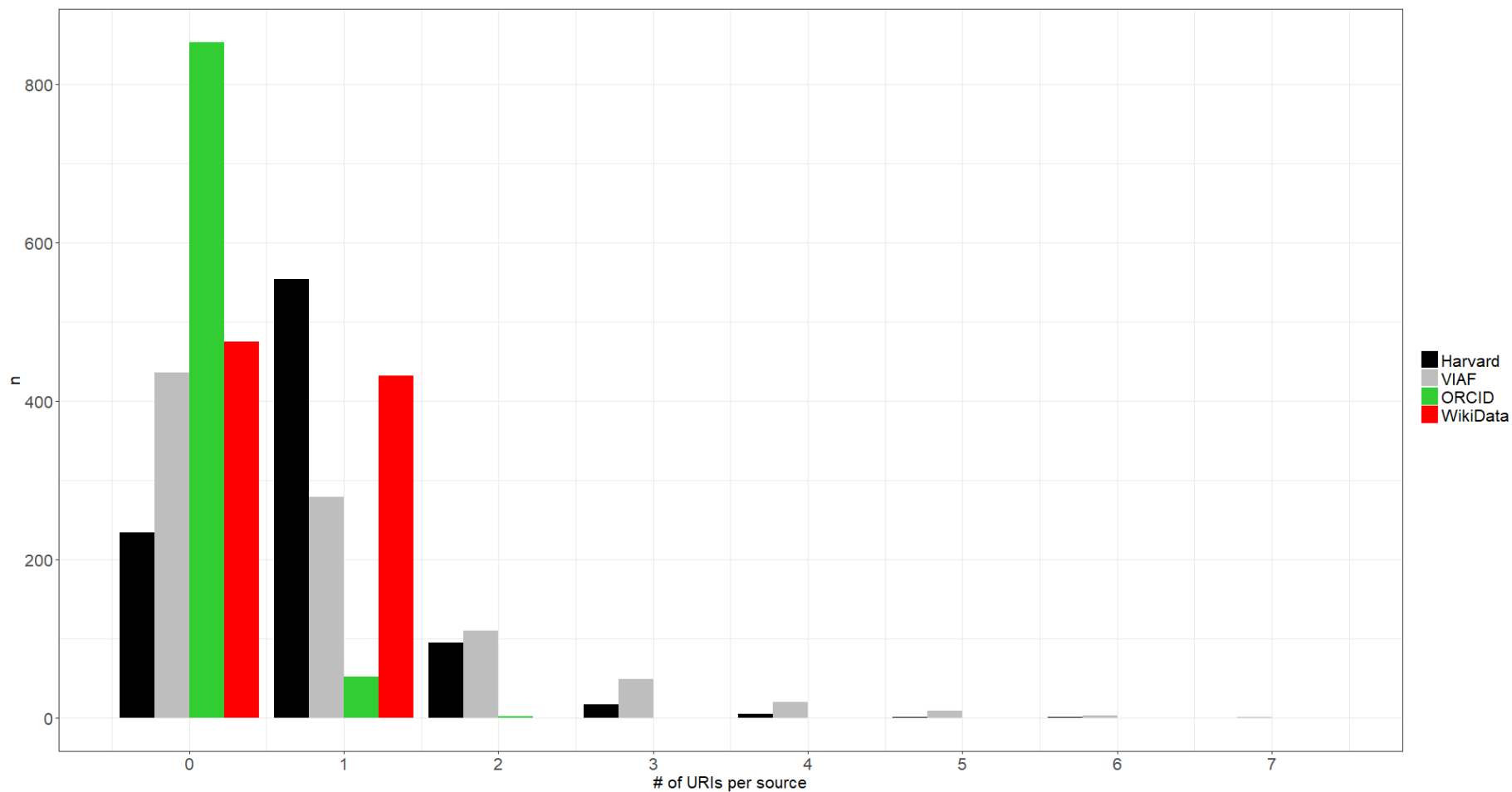


Stats

- ▶ Ca. 1.7M specimens (to be) on virtual herbarium
- ▶ 71% of specimens with digitized/known collector linked
→ 0.96M out of 1.35M
- ▶ 731 collectors linked
→ 18 hours of work
→ Out of 907 processed collector names, 175 could not be linked.



Stats: URIs per collector & source



Outstanding issues

- ▶ Multiple entries of same person (?)
→ What degree of certainty do we recommend as a requirement for a link to be made?
- ▶ Collector teams (est. 5-10% of MBG herbarium specimens)
- ▶ GDPR and living collectors?
- ▶ Integration with Darwin Core / GBIF?

