

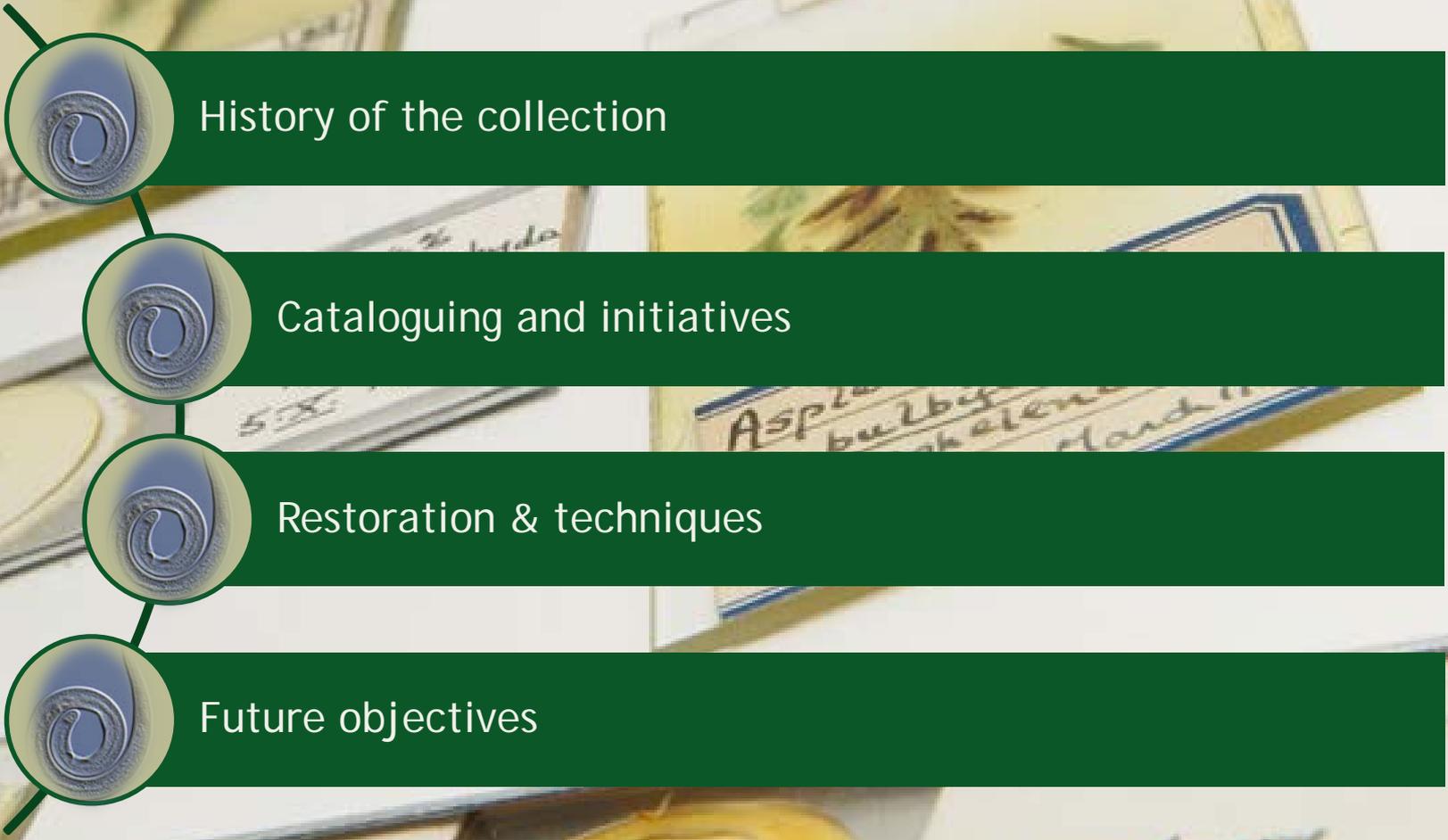
Curation & Maintenance of the Rothamsted Nematode Collection Housed at Fera

Workshop on the Maintenance of Nematode Collections

NVWA, Geertjesweg 15, Wageningen (NL), 2017-09-05/06



Overview



History of the collection

Cataloguing and initiatives

Restoration & techniques

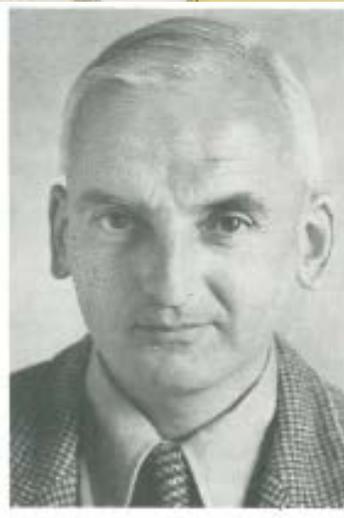
Future objectives

Rothamsted Nematode Collection (RNC)

- Oldest slides date back to the 1930s
- Nematologists maintained a general collection from 1953



ROTHAMSTED
RESEARCH



15 Aphelencheoides

Strawberry

42
Euphorbia
R Stone
1972

plen
bul
1972

Calif.
154

Cataloguing of the RNC

Type and voucher specimens

- ca. 21,000 slides
- ca. 4,000 type slides
- At least 12,000 type specimens



strawberry

Cataloguing of the RNC



Nematode Collection Europe

Catalogue included as part of the NCE

 HOME NOMENCLATURE - COLLECTIONS - SERVICES

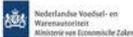
NEMATODE COLLECTION EUROPE (ACRONYM: NCE)

Belongs to one of the largest repositories
for nematode slides in Europe

Introduction

Nematode Collection Europe (acronym: NCE) belongs to one of the largest repositories for nematode slides in Europe. It includes a searchable type specimens collection and nomenclatorial database. These types are mostly used for scientific taxonomical studies and available upon request. The nomenclatorial database can be searched via the search button.

FEATURED PARTNERS

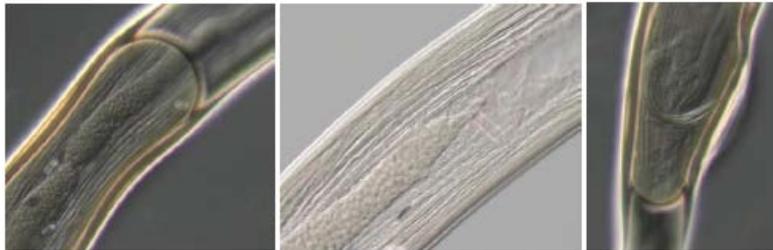
 UNIVERSITEIT GENT (BE)  Julius Kühn Institute (DE)  Nederlandse Voedsel- en Warenautoriteit
Ministerie van Economische Zaken (NL)  FERA (UK)

Contact

Email: [G. Karssen](mailto:G.Karssen)

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Slide Restoration

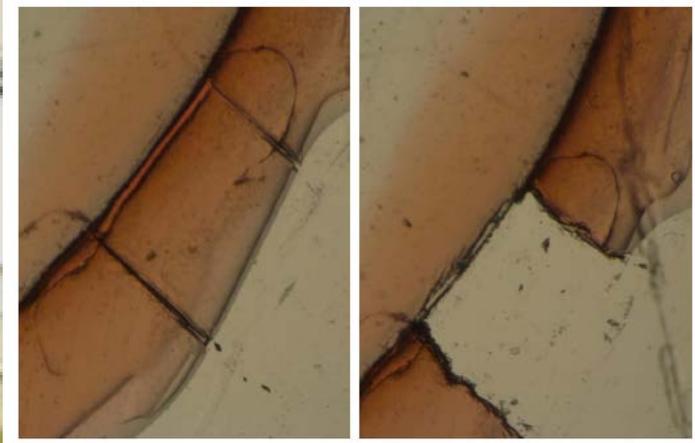
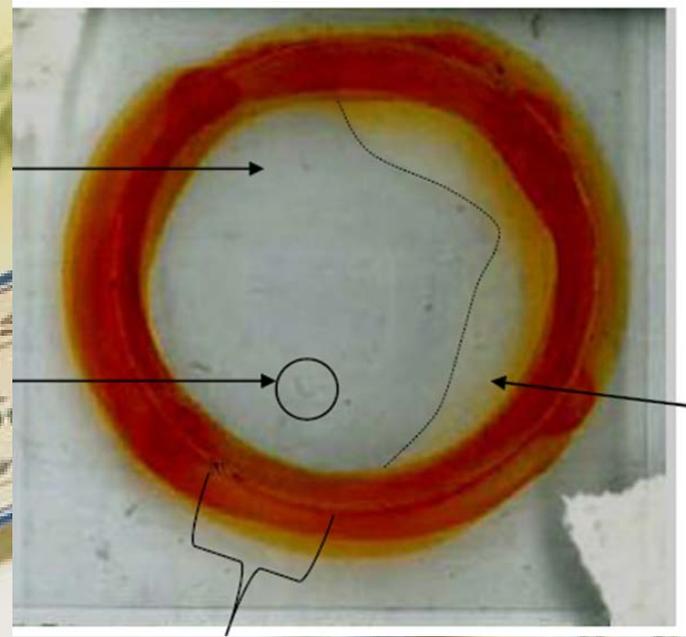
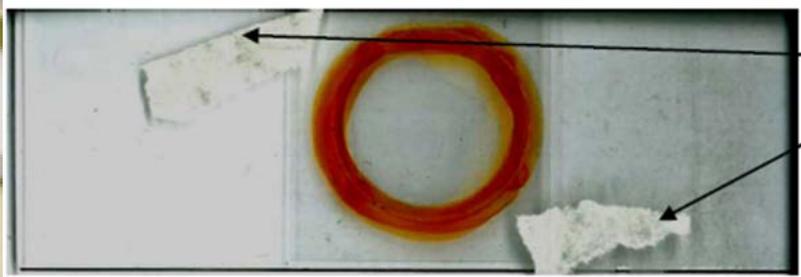


Slide Restoration

Fix. TAF. 5.12.60.
St. in CB. in Lph.
Mtd. in Gly 7.12.60
168/4/9 _{1 2 4 5 6}

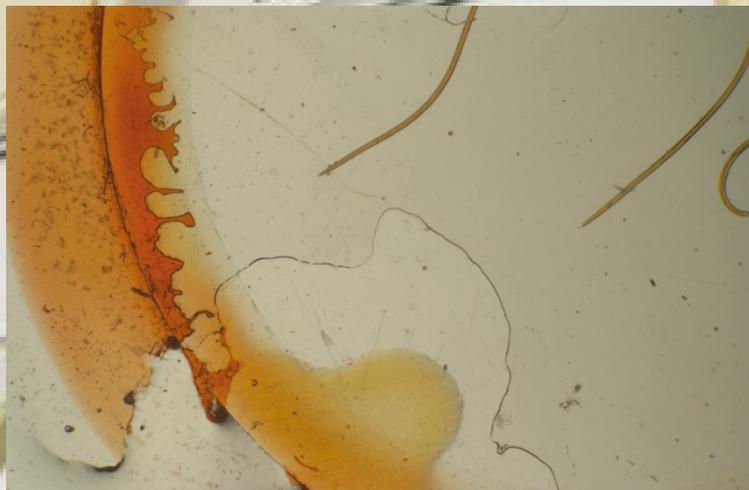
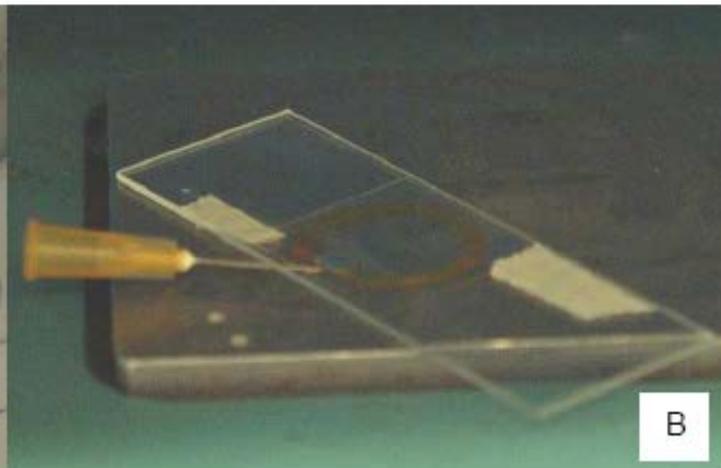


Longidorus
attenuatus.
6 1st stage ll.
From Norwich.
Coll. B.D.H
paratypes ①

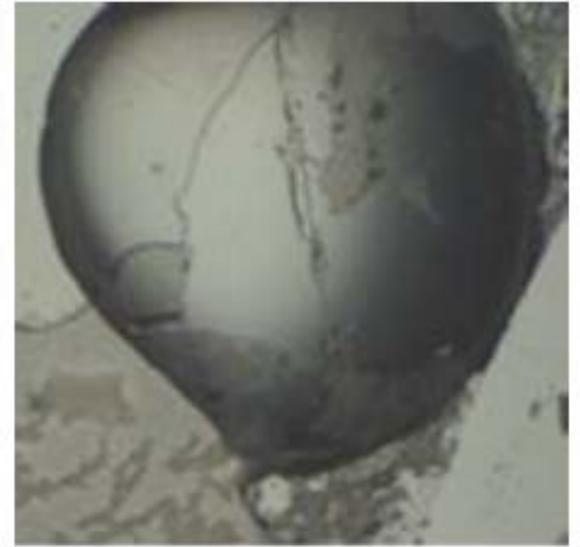
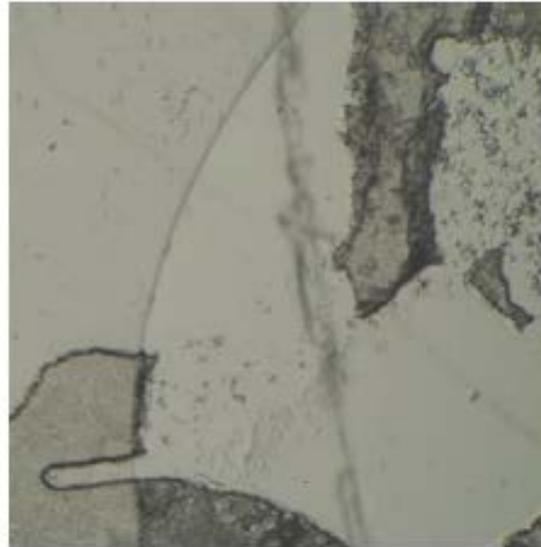
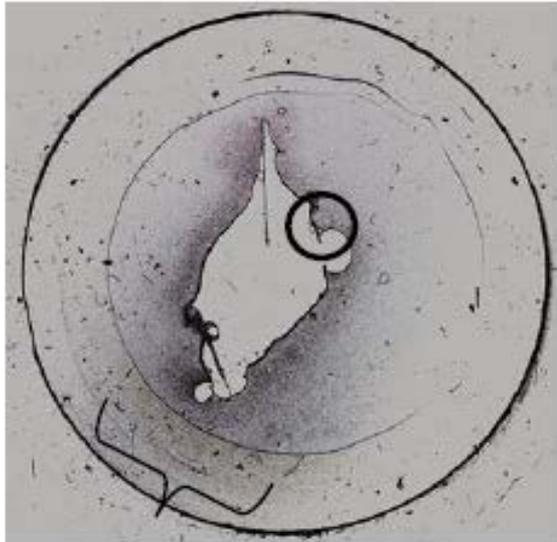


Escalton, Cant.
154
Strawberry

Slide Restoration



Slide Restoration



Slide Making



Slide Making

bioRxiv

Issue 12

Choosing A Microscope Slide Sealant: A Review Of Aging Characteristics And The Development Of A New Test, Using Low Oxygen Environments - Lu Allington and Emma Sherlock, NHM, London

Abstract

Glyceel has been traditionally used to seal zoological mounts at the Natural History Museum (NHM), London. Production of this polymer has recently ceased and an alternative must be identified. A review of chemical composition and testimonies from the published literature have been combined with a new experimental method to achieve this goal. Of the 13 polymers tested, Canada balsam was found to combine mechanical stability, excellent barrier properties and good aging characteristics. It has also been found that Canada balsam does not react with glycerine, wax, saliva, phenol, or immersion oil. Canada balsam is therefore recommended as a ringing sealant for microscope slides. The new experimental method, developed for this investigation, utilises anoxic environments and has a wider application as a low-cost test of polymer mechanical stability and barrier properties.

Introduction

The prompting of this project was the discontinuation of the sealing solution Glyceel (a solution of linseed oils, alcohol, nitrocellulose, butyl acetate, and toluol). This was the most commonly used sealant (although certainly not the only one) in the nematode and copepod research groups in the Zoology Department at the Natural History Museum (NHM), London. The discontinuation of Glyceel has brought concern and heated discussion within the international nematode research community as a whole (Psmallion). An alternative needs to be found which would be at least as effective as Glyceel. Although it is commonly recognised that sealing permanent slides is very important, particularly those slides using mountants such as glycerine,



Future Objectives

CABI Collection

- Formal agreement signed and in place
- Collection to move to Fera this year
- Catalogue to be added to NCE

Accreditation

- Support ISO 17025
- ISO accreditation of the collection in its entirety

NHM

- Electronic images/e-types



Acknowledgements

Defra

NVWA

Bex Lawson

Fixed: 4%
Formaldehyde
Mid: Euparal
A. R Stone
5.8 1972

565
Asplenium
bulbiferum
with Aphelenchoides
progenia - Glard 1952

Escalon, Calif.
154

Strawberry

15 Aphelenchoides