Introduction to the thematic databases as support of Plant Health RA

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efsa
EUROPEAN FOOD SAFETY AUTHORITY

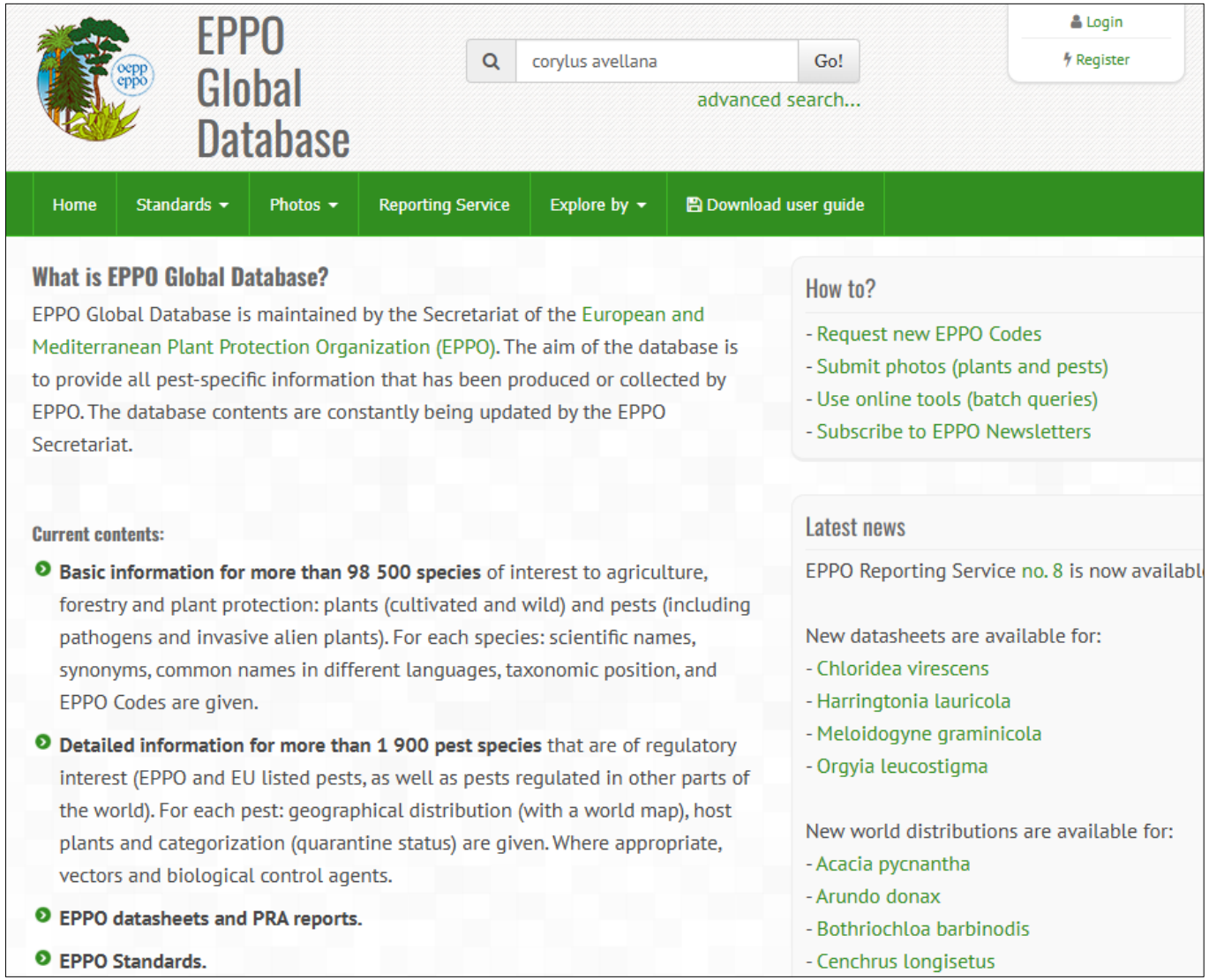
DATABASES

DATABASES AND OTHER LITERATURE SOURCES

	Database
1	EPPO Global Database
2	CABI Crop Protection Compendium
3	Aphids on World Plants
4	BIOTA of New Zealand
5	Database of Insects and their Food Plants
6	Database of the World's Lepidopteran Hostplants
7	Leaf-miners
8	Nemaplex
9	Plant Parasites of Europe
10	Plant Pest Information Network
11	Scalenet
12	Scolytinae hosts and distribution database
13	Spider Mites Web
14	USDA ARS Fungi Database
15	World Agroforestry
16	Web of Science: All Databases (Web of Science Core Collection, CABI: CAB Abstracts, BIOSIS Citation Index, Chinese Science Citation Database, Current Contents Connect, Data Citation Index, FSTA, KCI-Korean Journal Database, Russian Science Citation Index, MEDLINE, SciELO Citation Index, Zoological Record)
17	EUROPHYT
18	TRACES-NT
19	Databases from the exporting country, if available

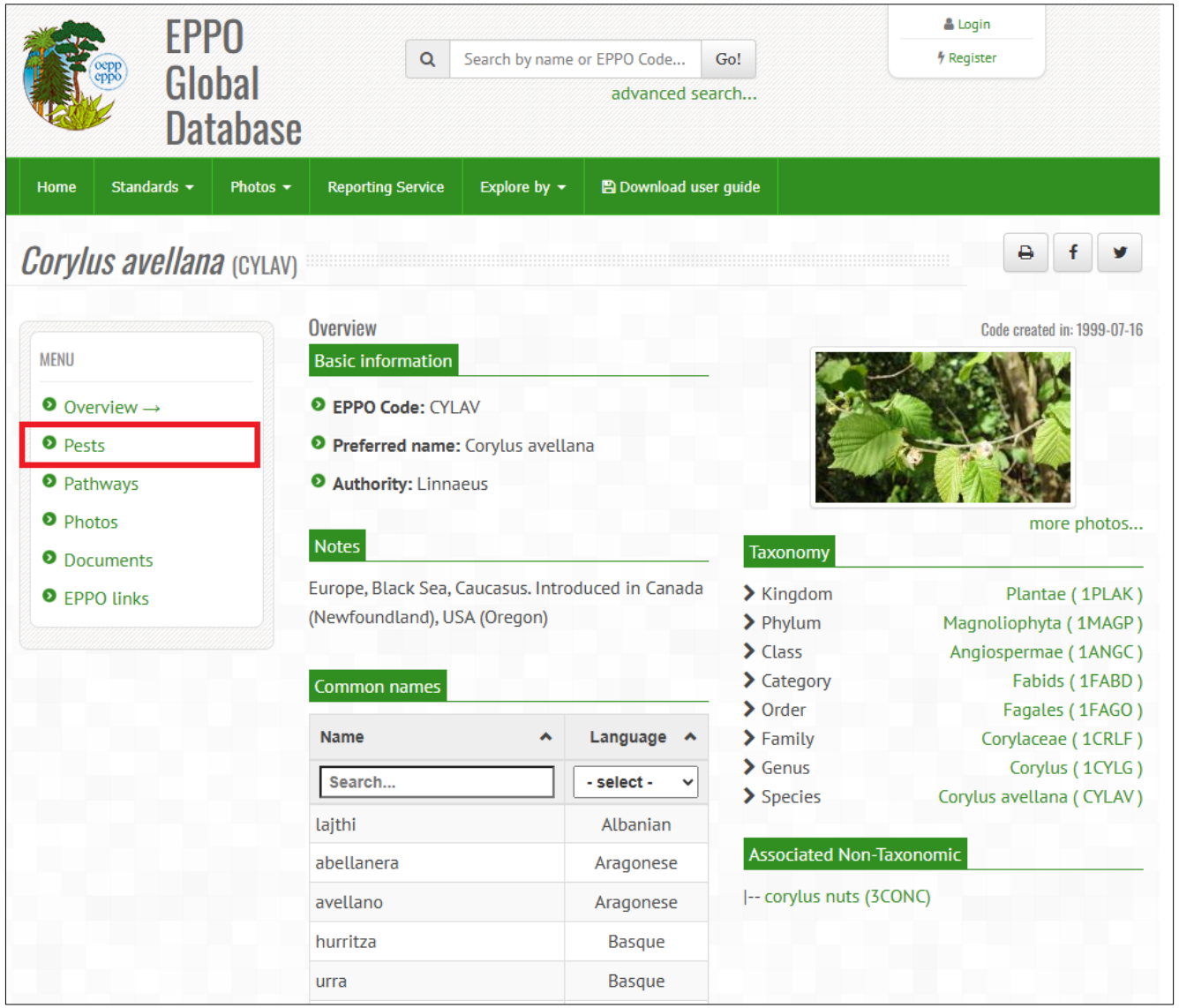
	Literature
1	Amrine, J. W., & Stasny, T. A. (1994). Catalog of the Eriophyoidea (Acarina: Prostigmata) of the world. Indira Publishing House, 798 pp.
2	EPPO (European and Mediterranean Plant Protection Organization). (2020). EPPO Technical Document No. 1081, EPPO Study on the risk of bark and ambrosia beetles associated with imported non-coniferous wood, EPPO Paris.
3	Gagné, R. J., & Jaschhof, M. (2004). A catalog of the Cecidomyiidae (Diptera) of the world (No. 25). Washington, DC, USA: Entomological Society of Washington.
4	Wood, S. L., & Bright Jr, D. E. (1992). Hosts of Scolytidae and Platypodidae. Great Basin Naturalist Memoirs, 13(1), 12.
5	Xu, Y. M., & Zhao, Z. Q. (2019). Longidoridae and Trichodoridae (Nematoda: Dorylaimida and Triplonchida). Fauna of New Zealand, 79.

1. EPPO GLOBAL DATABASE



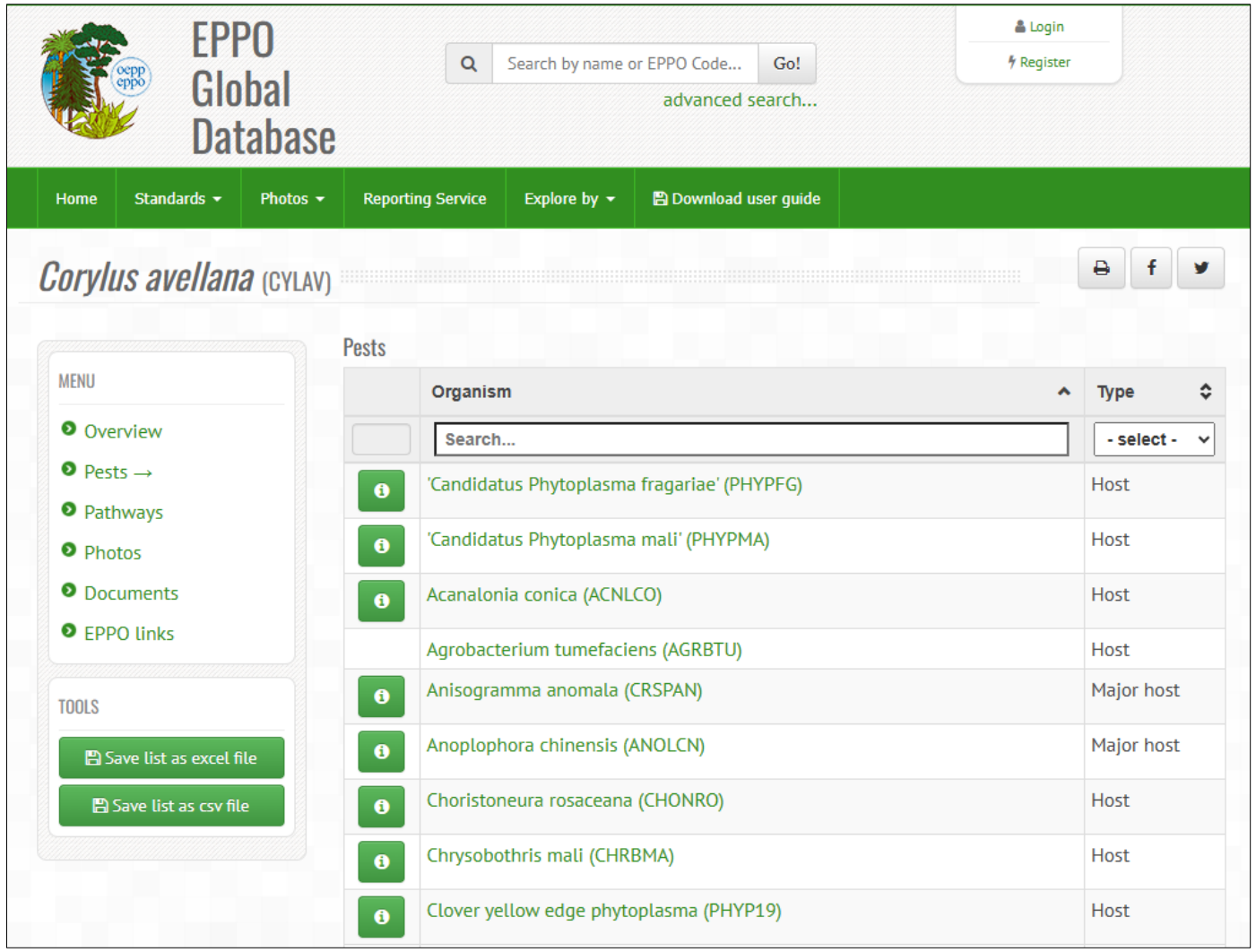
- Go to the database (here)
- Search by plant species name or EPPO code
  - As an example: *Corylus avellana*

1. EPPO GLOBAL DATABASE



- Go to the list of pests associated to a certain plant genus or plant species by selecting **Pests** in the menu

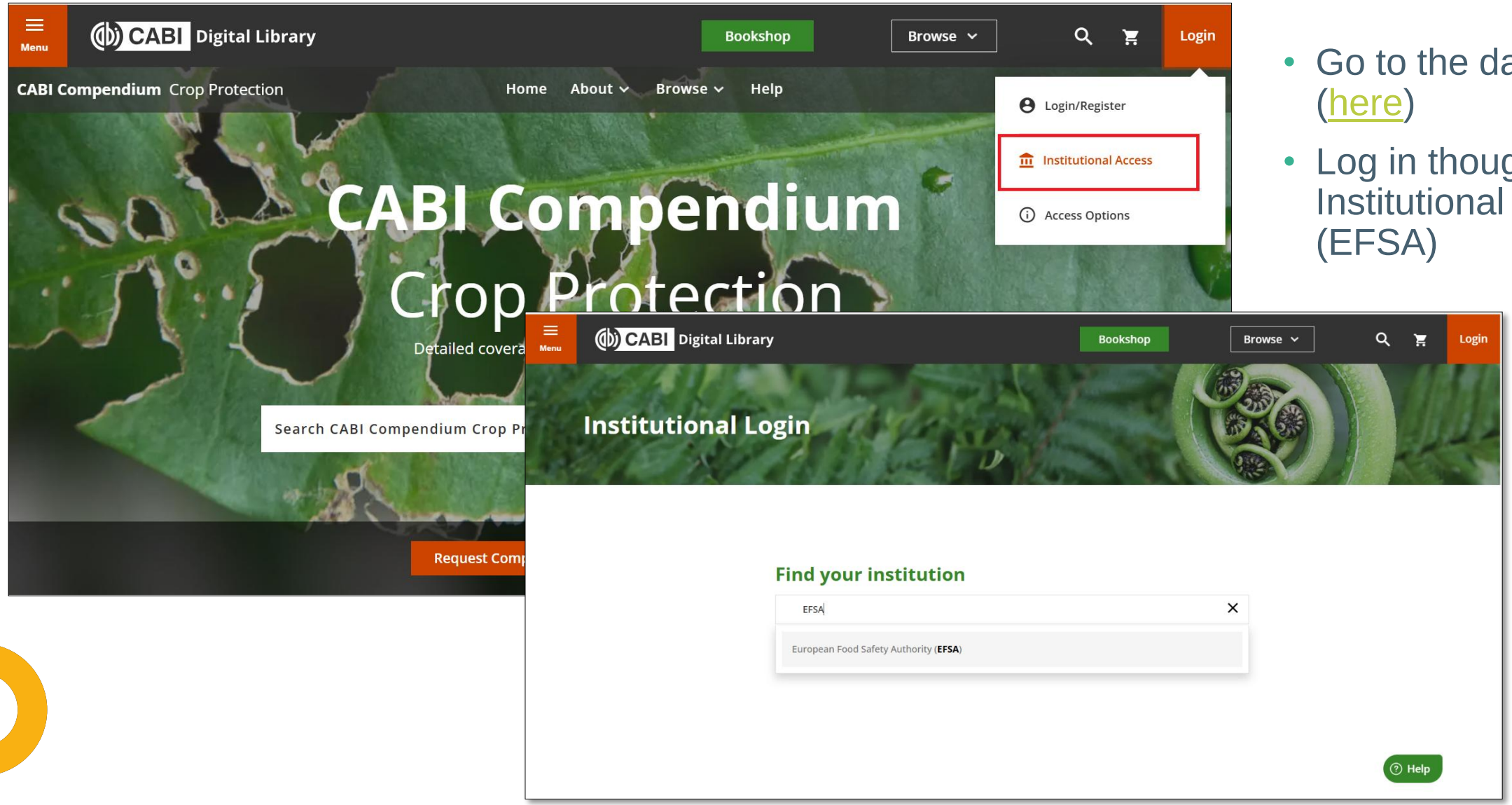
1. EPPO GLOBAL DATABASE



- Retrieve and add all pests to the **Mother document** (specifying the source database)
- If the pest is associated with ***Corylus*** (e.g., *Malacosoma americanum*, *Malacosoma disstria* **highlighted in red**) – it needs to be indicated also in the **Mother document**

Ilarvirus ApMV (APMV00)	Host
Lonsdalea quercina (ERWIQU)	Host
Lopholeucaspis japonica (LOPLJA)	Host
Malacosoma americanum (as Corylus) (MALAAM)	Host
Malacosoma disstria (as Corylus) (MALADI)	Host
Megaplatypus mutatus (PLTPMU)	Host
Monilinia fructigena (MONIFG)	Host

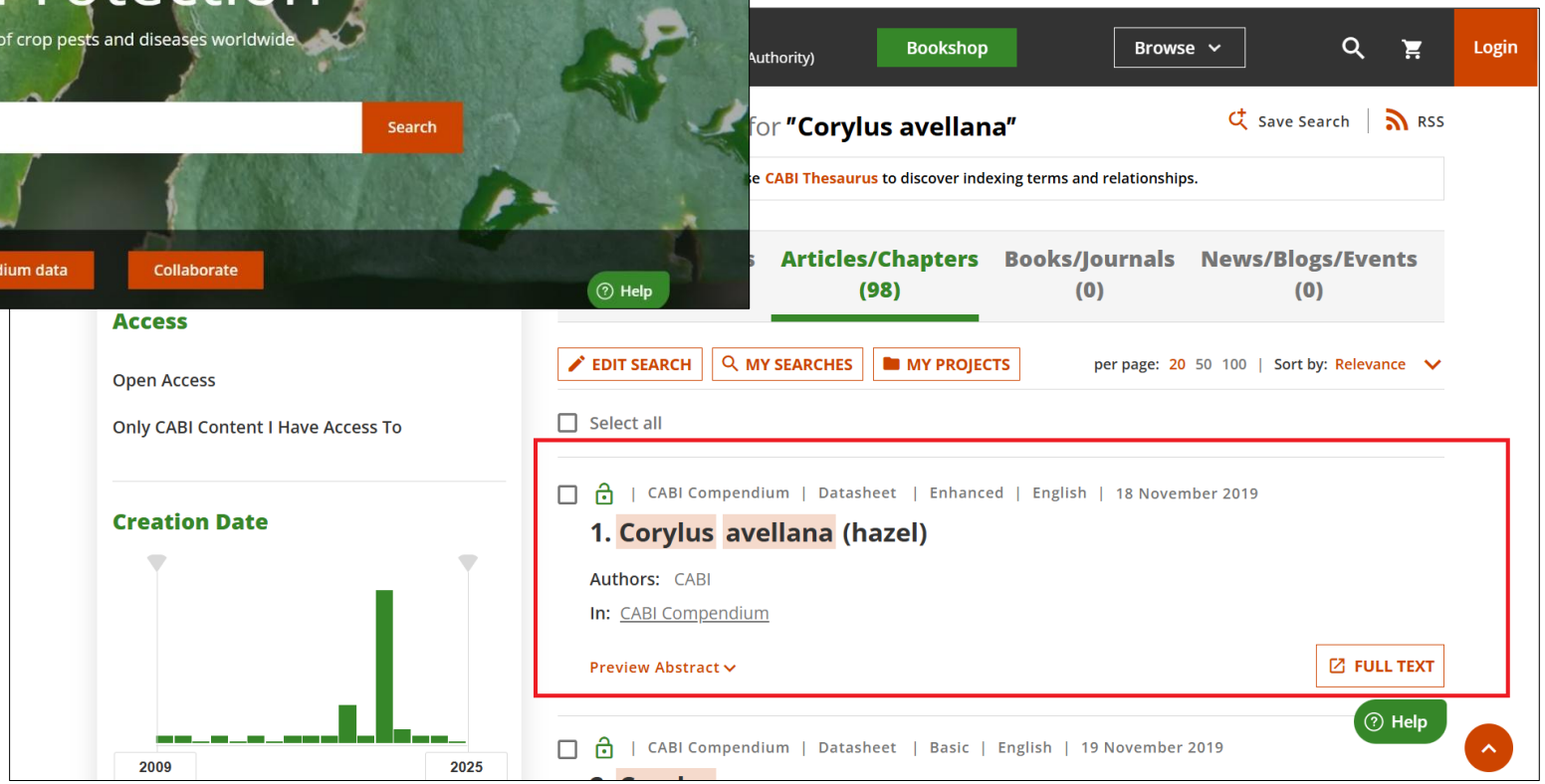
2. CABI CROP PROTECTION COMPENDIUM



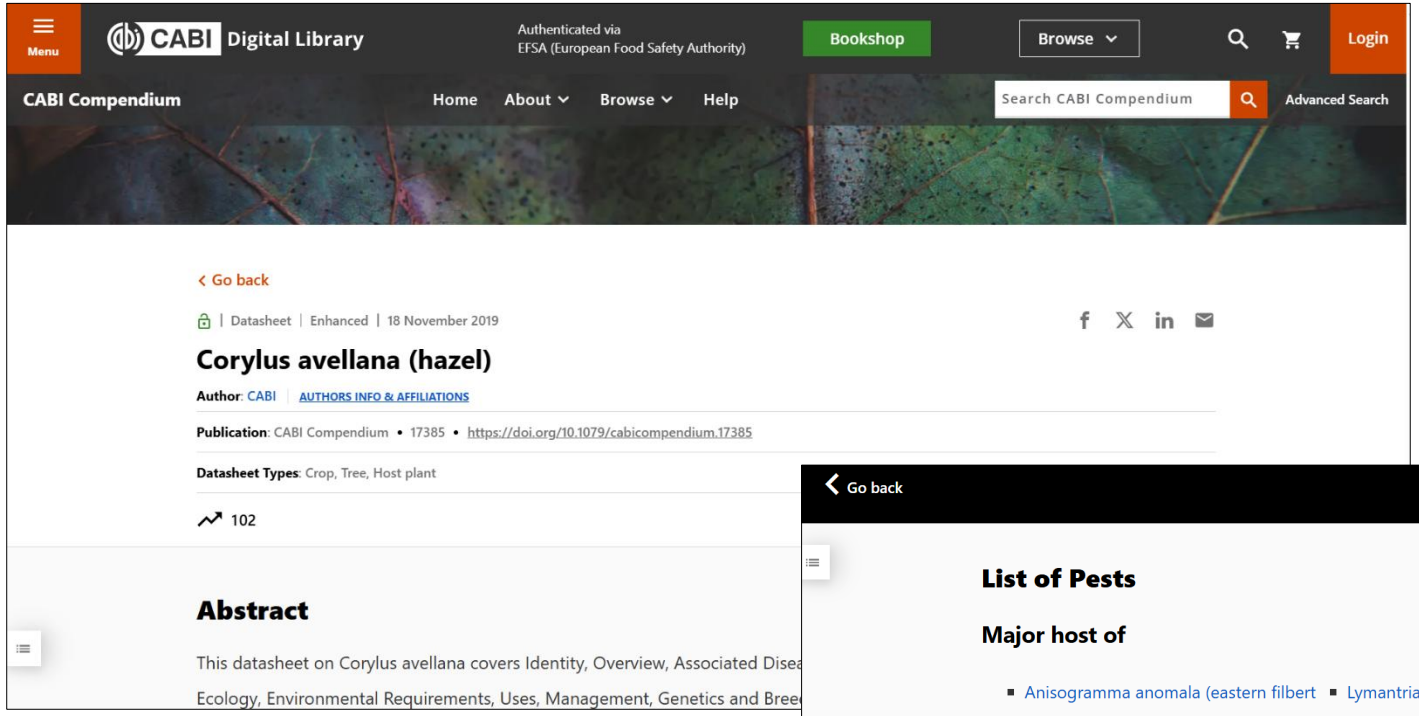
- Go to the database (here)
- Log in though Institutional Access (EFSA)

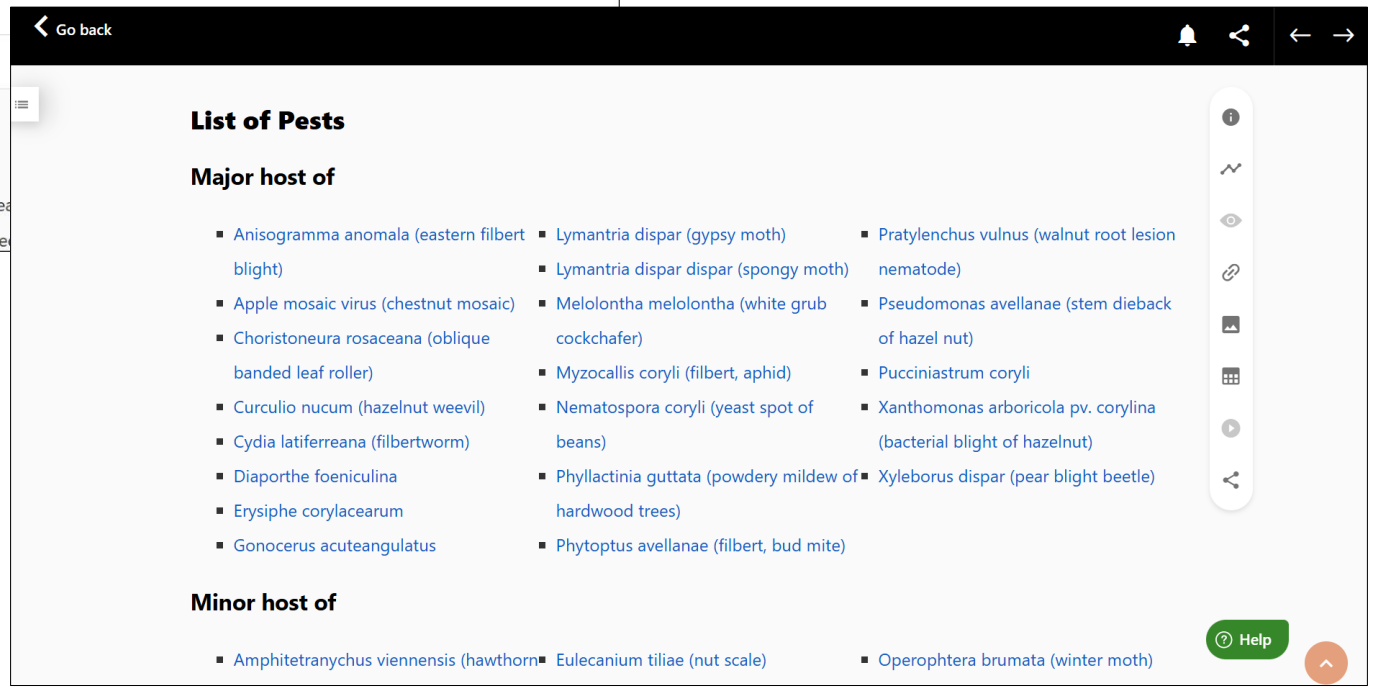
2. CABI CROP PROTECTION COMPENDIUM

- Search for the plant genus/species
  - As an example: *Corylus avellana*
- Select the corresponding Datasheet



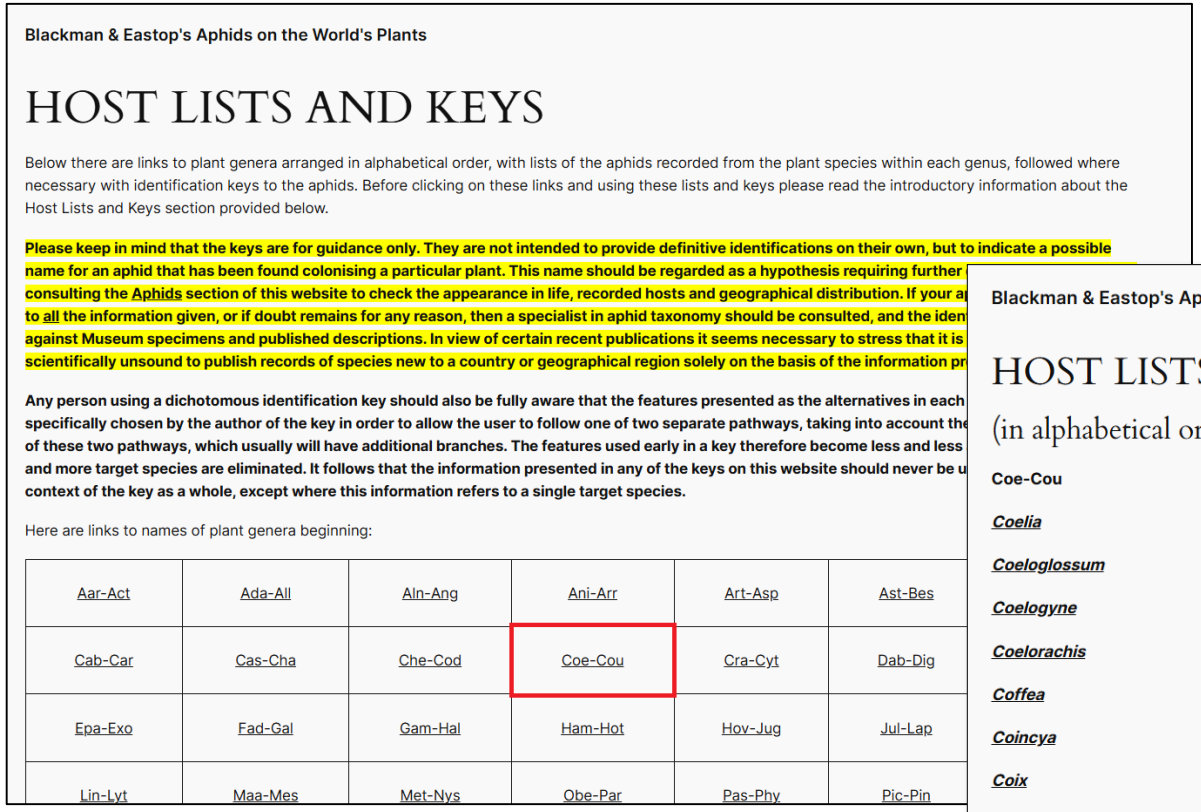
2. CABI CROP PROTECTION COMPENDIUM





- Scroll down to **List of Pests**
- Retrieve and add all pests to the **Mother document** (specifying the source database)

3. APHIDS ON WORLD PLANTS



Blackman & Eastop's Aphids on the World's Plants

HOST LISTS AND KEYS

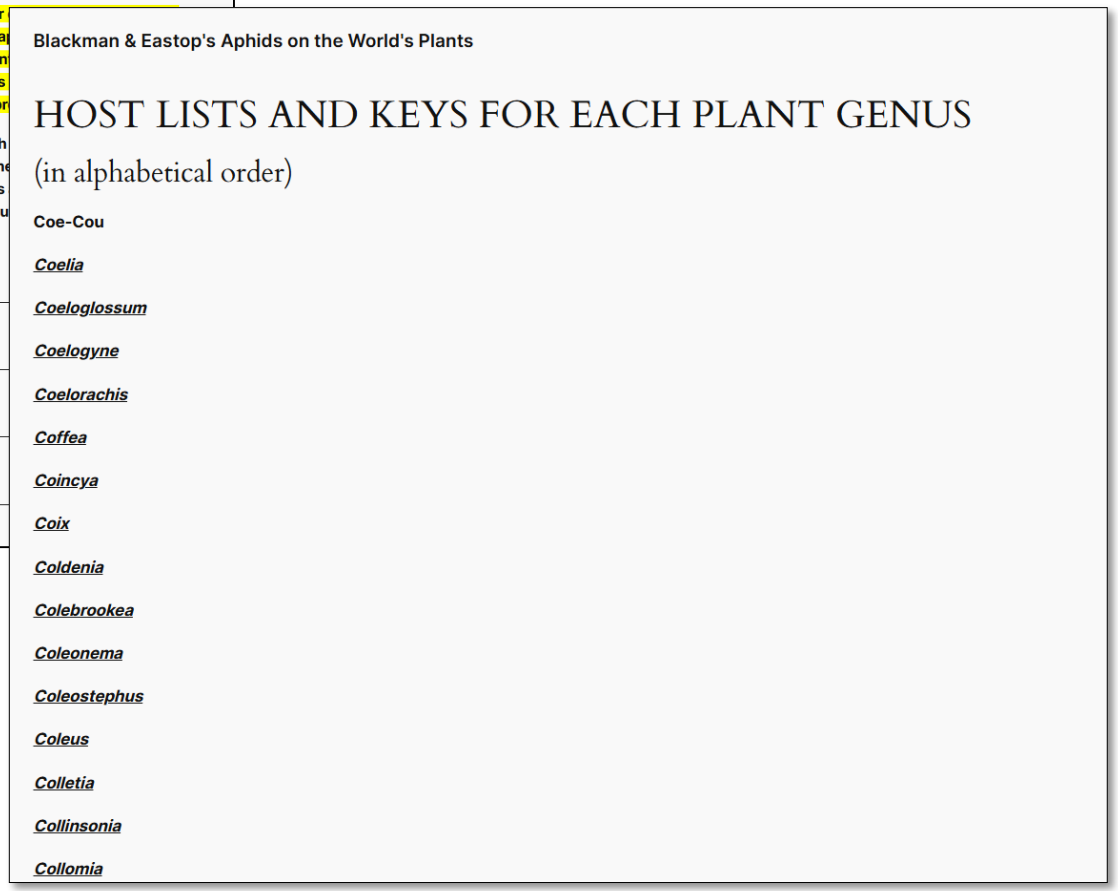
Below there are links to plant genera arranged in alphabetical order, with lists of the aphids recorded from the plant species within each genus, followed where necessary with identification keys to the aphids. Before clicking on these links and using these lists and keys please read the introductory information about the Host Lists and Keys section provided below.

Please keep in mind that the keys are for guidance only. They are not intended to provide definitive identifications on their own, but to indicate a possible name for an aphid that has been found colonising a particular plant. This name should be regarded as a hypothesis requiring further consulting the Aphids section of this website to check the appearance in life, recorded hosts and geographical distribution. If your a to all the information given, or if doubt remains for any reason, then a specialist in aphid taxonomy should be consulted, and the iden against Museum specimens and published descriptions. In view of certain recent publications it seems necessary to stress that it is scientifically unsound to publish records of species new to a country or geographical region solely on the basis of the information pr

Any person using a dichotomous identification key should also be fully aware that the features presented as the alternatives in each specifically chosen by the author of the key in order to allow the user to follow one of two separate pathways, taking into account the of these two pathways, which usually will have additional branches. The features used early in a key therefore become less and less and more target species are eliminated. It follows that the information presented in any of the keys on this website should never be u context of the key as a whole, except where this information refers to a single target species.

Here are links to names of plant genera beginning:

Aar-Act	Ada-All	Aln-Ang	Ani-Arr	Art-Asp	Ast-Bes
Cab-Car	Cas-Cha	Che-Cod	Coe-Cou	Cra-Cyt	Dab-Dig
Epa-Exo	Fad-Gal	Gam-Hal	Ham-Hot	Hov-Jug	Jul-Lap
Lin-Lyt	Maa-Mes	Met-Nys	Obe-Par	Pas-Phy	Pic-Pin



Blackman & Eastop's Aphids on the World's Plants

HOST LISTS AND KEYS FOR EACH PLANT GENUS

(in alphabetical order)

Coe-Cou

Coelia

Coeloglossum

Coelogyne

Coelorachis

Coffea

Coincya

Coix

Coldenia

Colebrookea

Coleonema

Coleostephus

Coleus

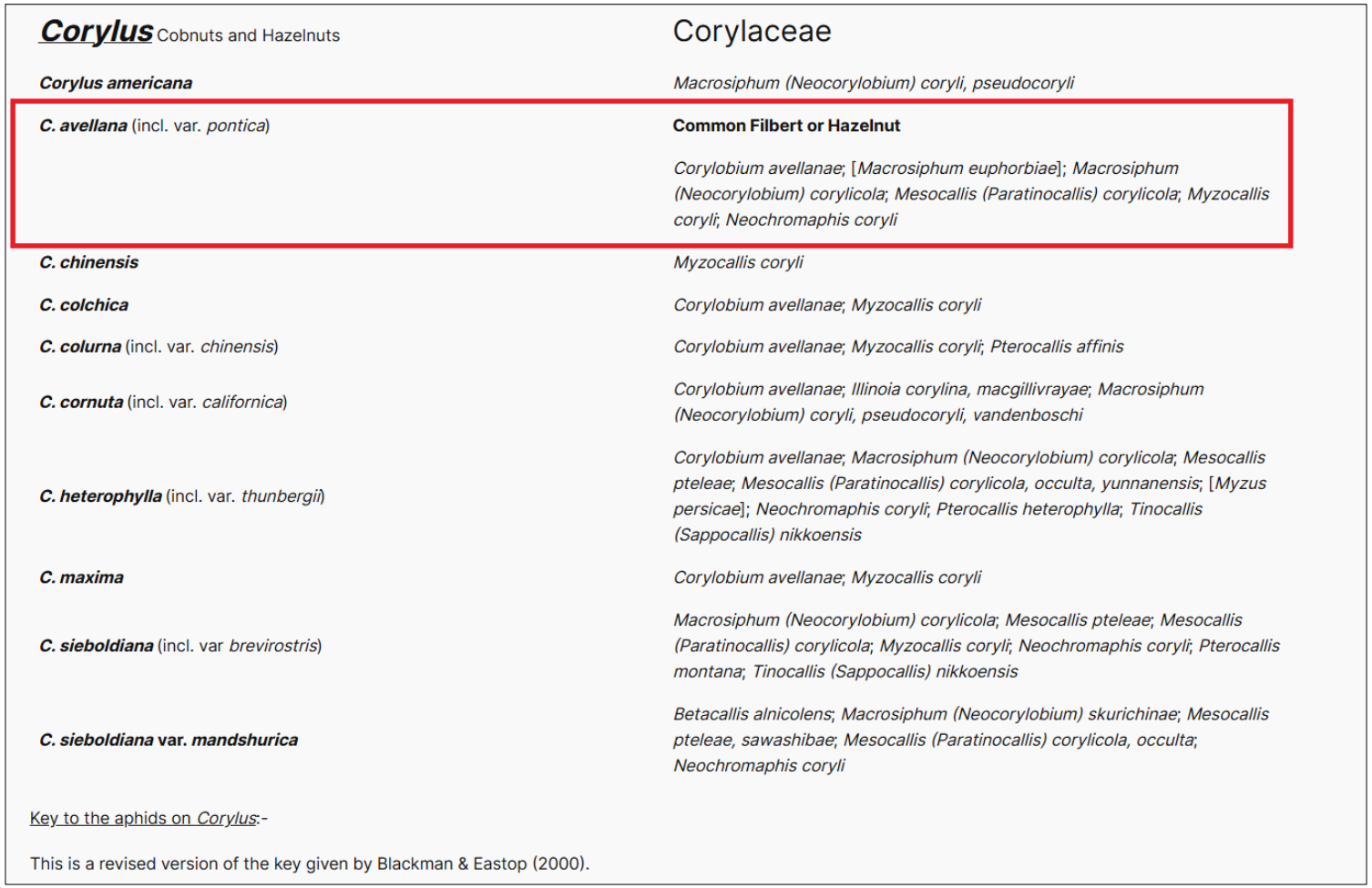
Colletia

Collinsonia

Collomia

- Go to the database (here)
- Search for host family

3. APHIDS ON WORLD PLANTS



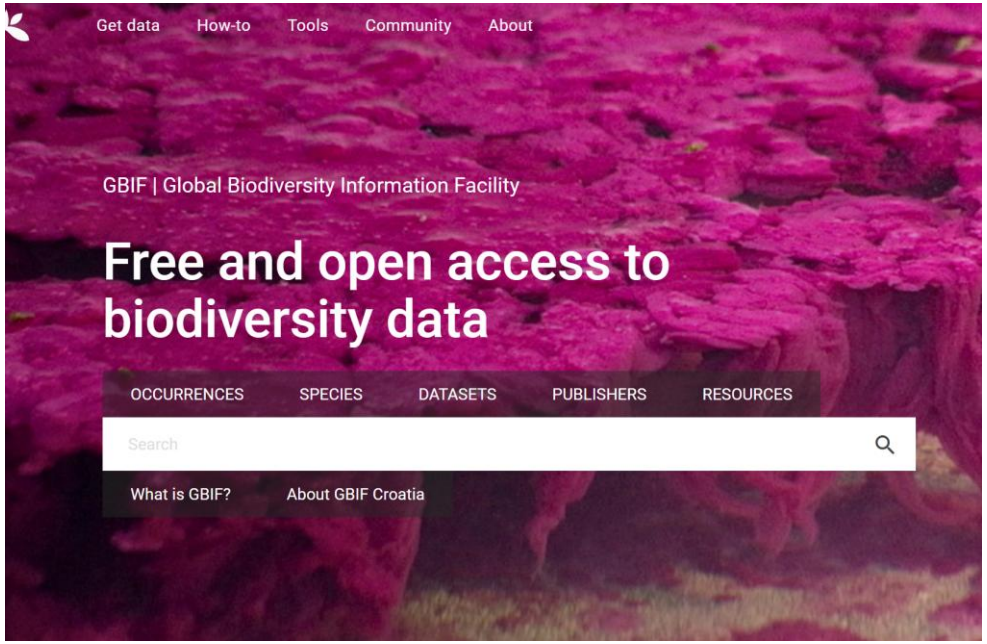
Corylus Cobnuts and Hazelnuts	Corylaceae
Corylus americana	*Macrosiphum (Neocorylobium) coryli, pseudocoryli*
C. avellana (incl. var. *pontica*)	**Common Filbert or Hazelnut** *Corylobium avellanae*; [*Macrosiphum euphorbiae*]; *Macrosiphum (Neocorylobium) corylicola*; *Mesocallis (Paratinocallis) corylicola*; *Myzocallis coryli*; *Neochromaphis coryli*
C. chinensis	*Myzocallis coryli*
C. colchica	*Corylobium avellanae*; *Myzocallis coryli*
C. colurna (incl. var. *chinensis*)	*Corylobium avellanae*; *Myzocallis coryli*; *Pterocallis affinis*
C. cornuta (incl. var. *californica*)	*Corylobium avellanae*; *Illinoia corylina, macgillivrayae*; *Macrosiphum (Neocorylobium) coryli, pseudocoryli, vandenboschi*
C. heterophylla (incl. var. *thunbergii*)	*Corylobium avellanae*; *Macrosiphum (Neocorylobium) corylicola*; *Mesocallis pteleae*; *Mesocallis (Paratinocallis) corylicola, occulta, yunnanensis*; [*Myzus persicae*]; *Neochromaphis coryli*; *Pterocallis heterophylla*; *Tinocallis (Sappocallis) nikkoensis*
C. maxima	*Corylobium avellanae*; *Myzocallis coryli*
C. sieboldiana (incl. var *brevirostris*)	*Macrosiphum (Neocorylobium) corylicola*; *Mesocallis pteleae*; *Mesocallis (Paratinocallis) corylicola*; *Myzocallis coryli*; *Neochromaphis coryli*; *Pterocallis montana*; *Tinocallis (Sappocallis) nikkoensis*
C. sieboldiana* var. *mandshurica	*Betacallis alnicolens*; *Macrosiphum (Neocorylobium) skurichinae*; *Mesocallis pteleae, sawashibae*; *Mesocallis (Paratinocallis) corylicola, occulta*; *Neochromaphis coryli*

Key to the aphids on *Corylus*:-

This is a revised version of the key given by Blackman & Eastop (2000).

- Look for pests that are reported for host species (e.g., *Corylus avellana*)
- Retrieve and add all pests to the **Mother document** (specifying the source database)
- In the case of a pest having two names (e.g., *Macrosiphum (Neocorylobium) corylicola*), put manually into the **Mother document** as a **species name** (column A) *Macrosiphum corylicola* and **other name** (column B) *Neocorylobium corylicola* **(see the next slide)**

GBIF



GBIF—the Global Biodiversity Information Facility—is an international network and data infrastructure funded by the world's governments and aimed at providing anyone, anywhere, open access to data about all types of life on Earth.

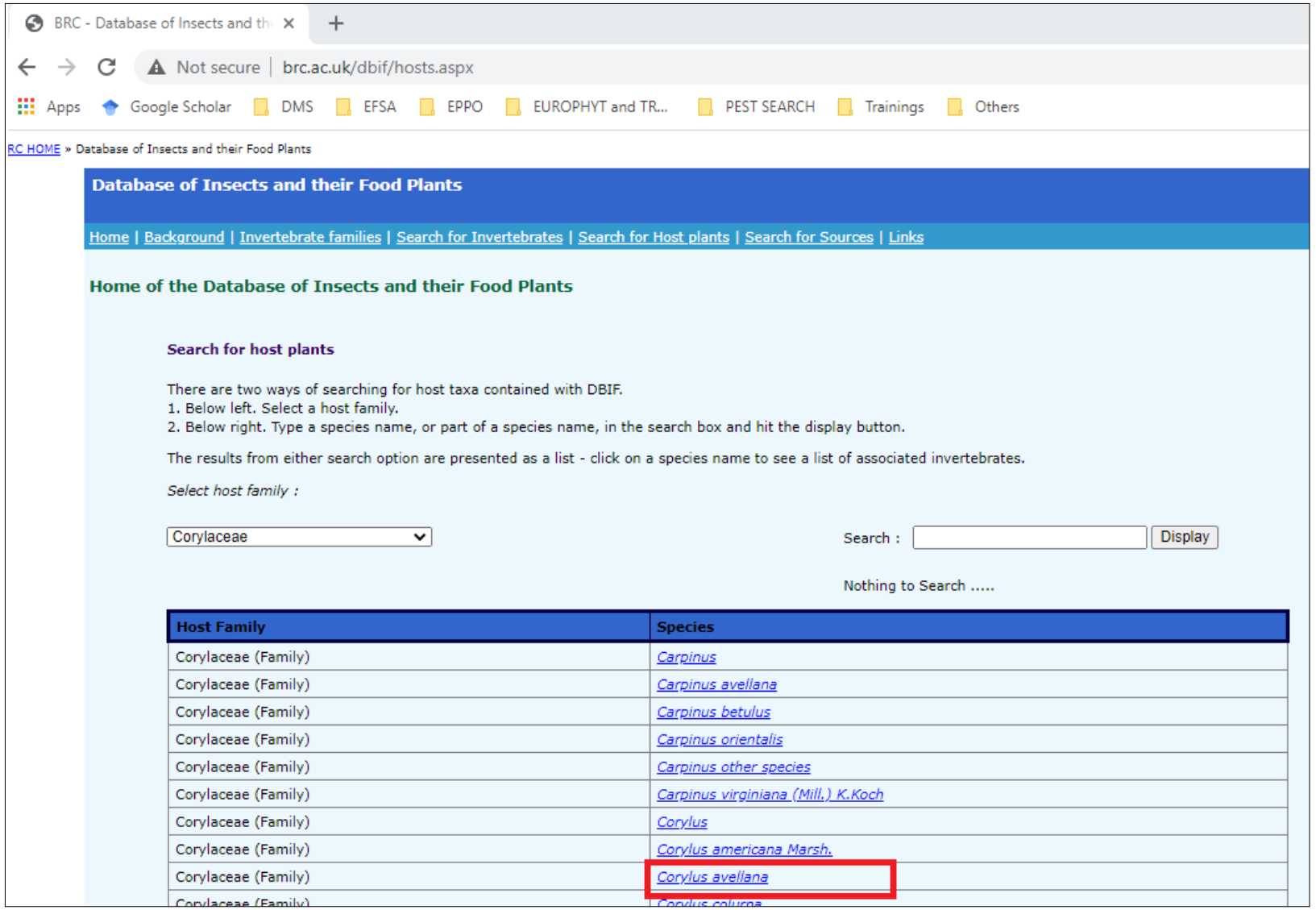
3,561,469,133
Occurrence records

118,752
Datasets

2,588
Publishing institutions

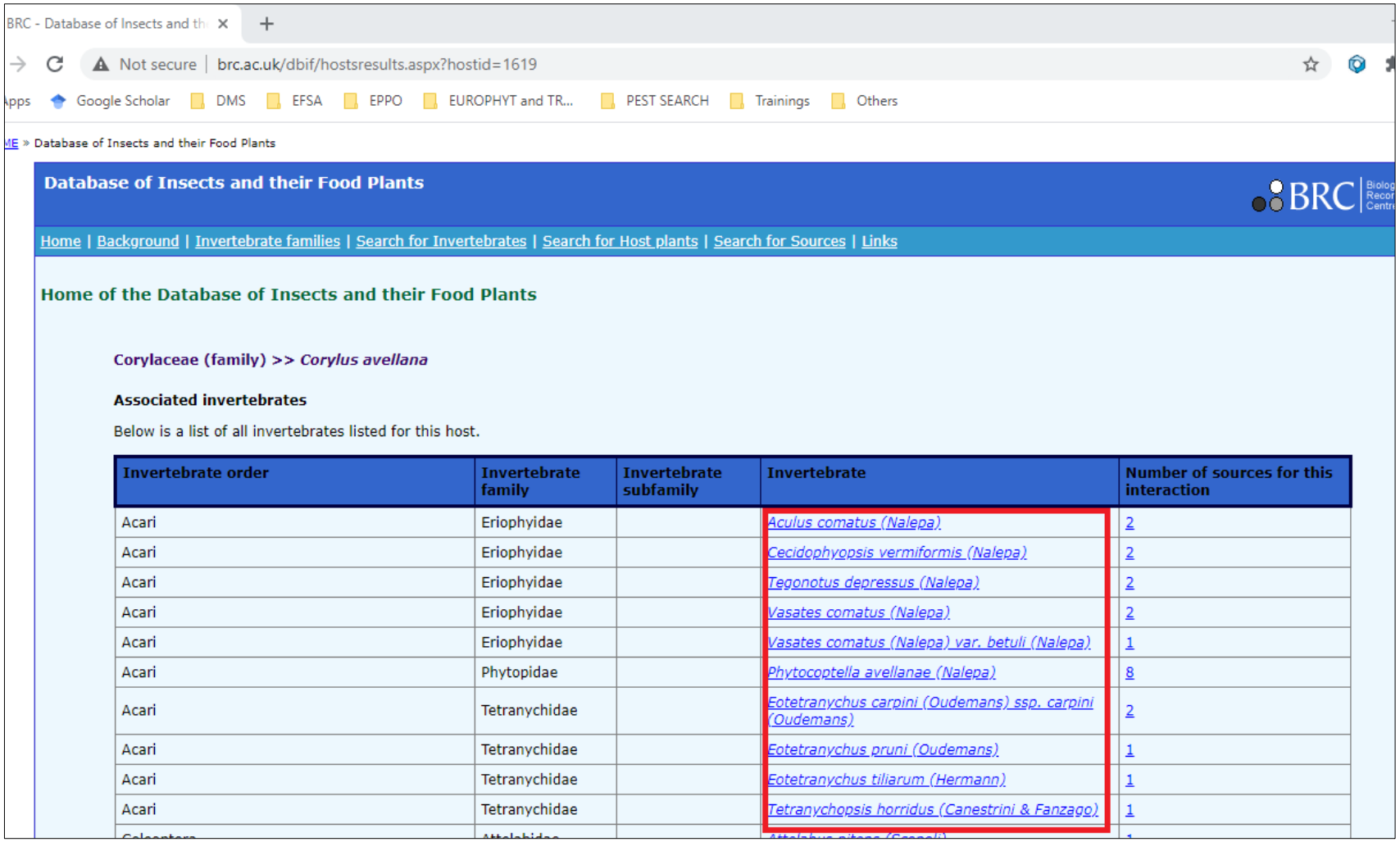
13,793
Peer-reviewed papers using data

5. DATABASE OF INSECTS AND THEIR FOOD PLANTS



- Select the plant species/plant genus
  - As an example: *Corylus avellana*
  - *LINK TO DATABASE*

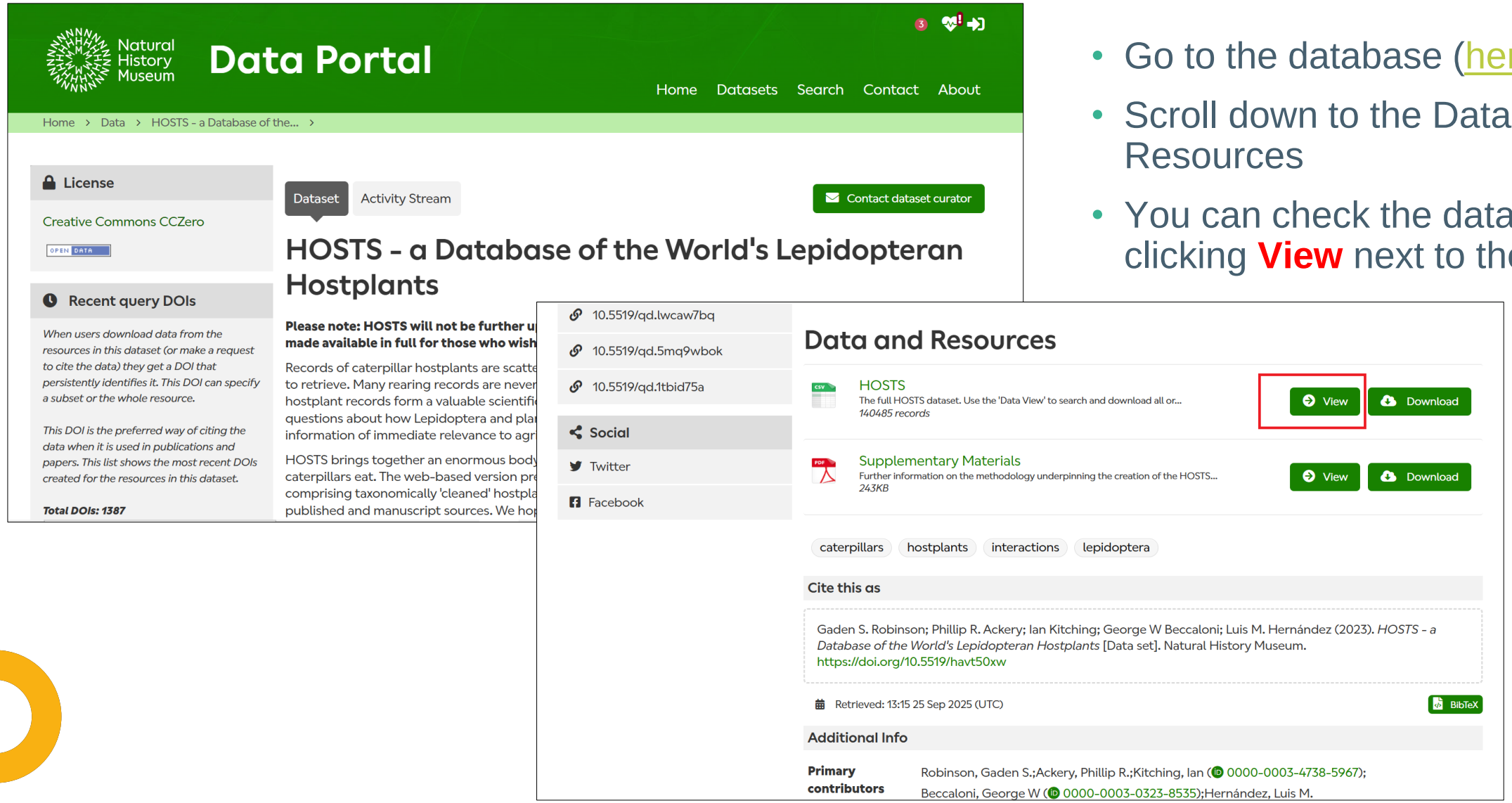
5. DATABASE OF INSECTS AND THEIR FOOD PLANTS



Invertebrate order	Invertebrate family	Invertebrate subfamily	Invertebrate	Number of sources for this interaction
Acari	Eriophyidae		Aculus comatus (Nalepa)	2
Acari	Eriophyidae		Cecidophyopsis vermiformis (Nalepa)	2
Acari	Eriophyidae		Tegonotus depressus (Nalepa)	2
Acari	Eriophyidae		Vasates comatus (Nalepa)	2
Acari	Eriophyidae		Vasates comatus (Nalepa) var. betuli (Nalepa)	1
Acari	Phytopidae		Phytocoptella avellanae (Nalepa)	8
Acari	Tetranychidae		Eotetranychus carpini (Oudemans) ssp. carpini (Oudemans)	2
Acari	Tetranychidae		Eotetranychus pruni (Oudemans)	1
Acari	Tetranychidae		Eotetranychus tiliarum (Hermann)	1
Acari	Tetranychidae		Tetranychopsis horridus (Canestrini & Fanzago)	1

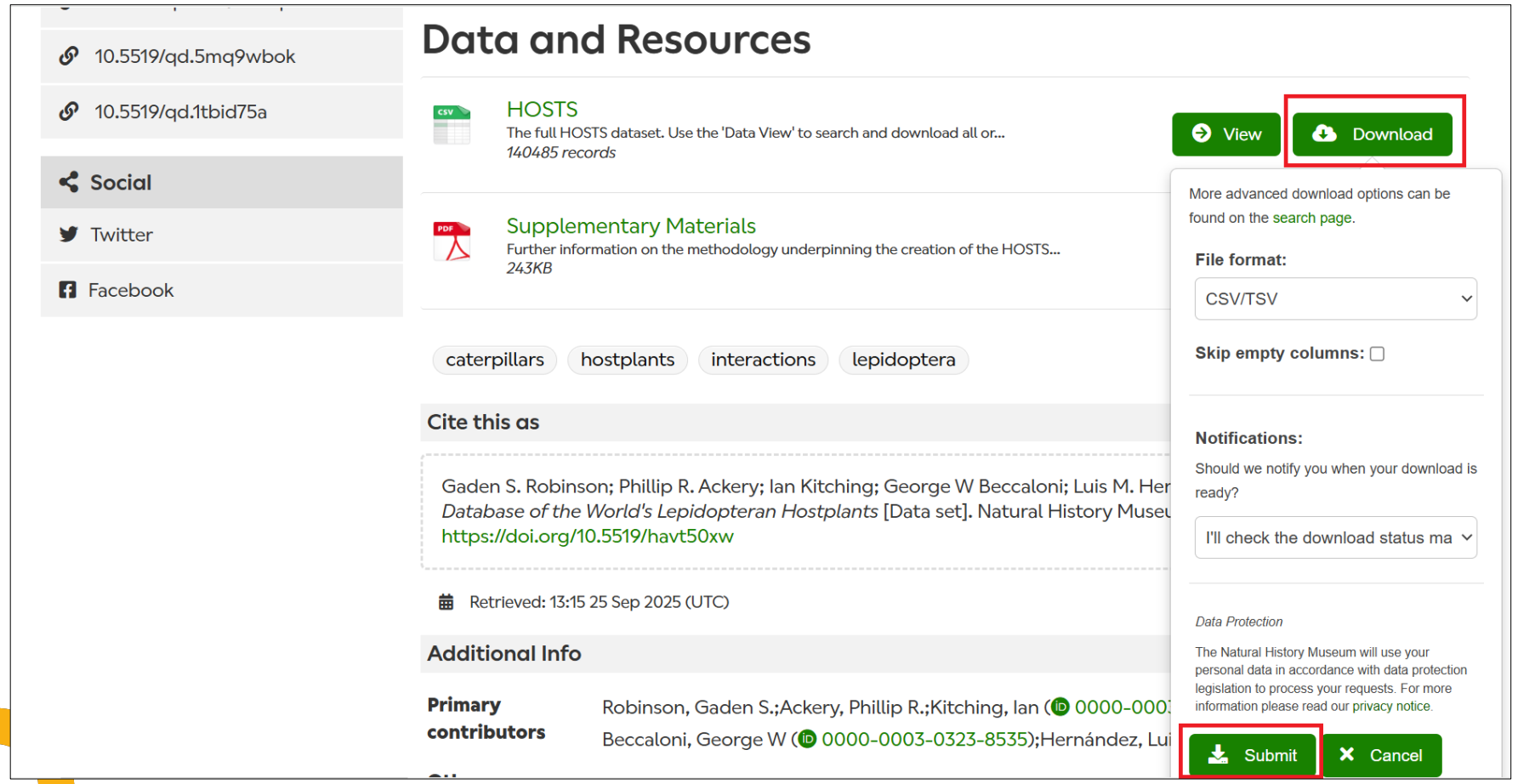
- Look for pests that are reported for host species
- Retrieve and add all pests to the **Mother document** (specifying the source database)

6. DATABASE OF THE WORLD'S LEPIDOPTERAN HOSTPLANTS



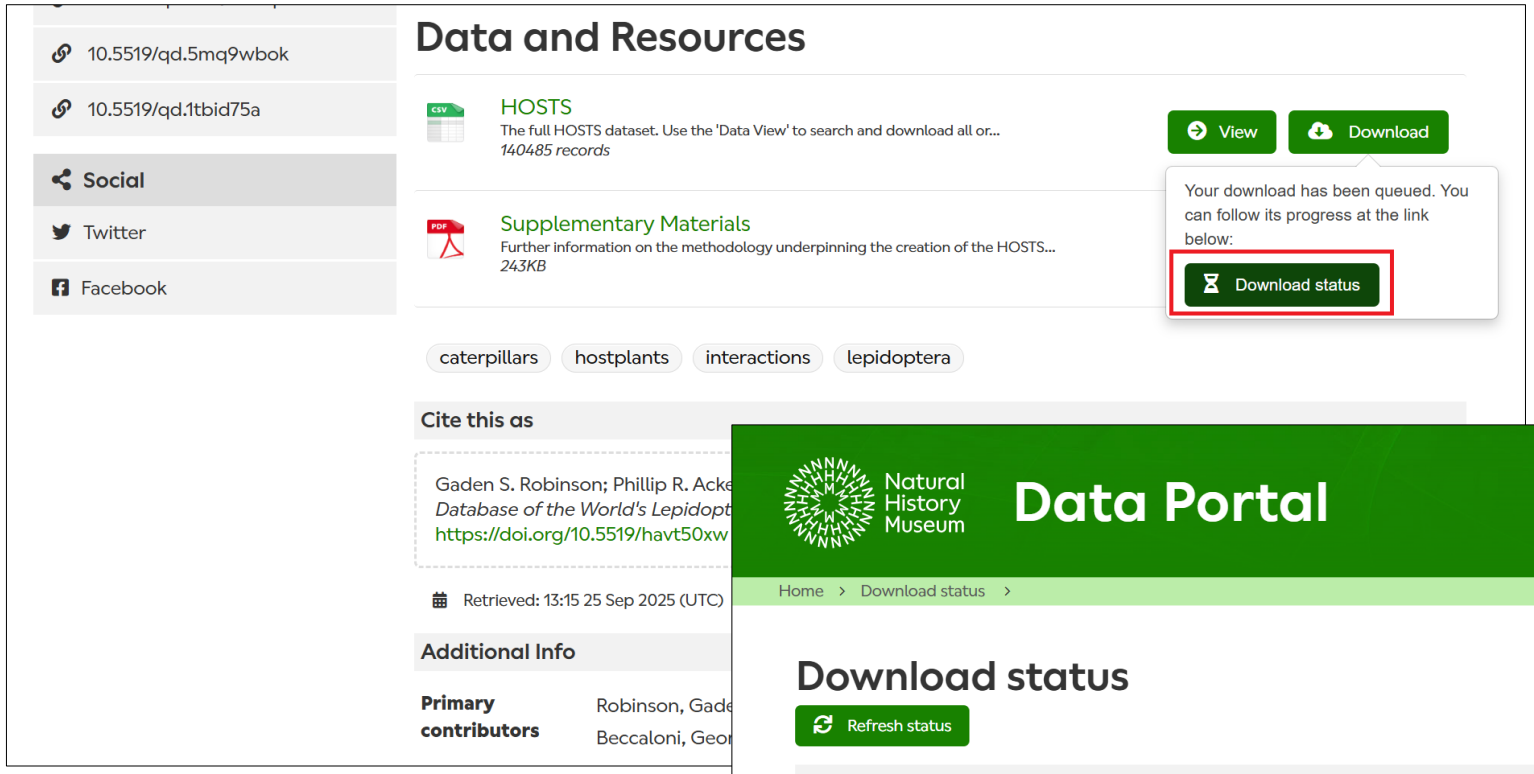
- Go to the database (here)
- Scroll down to the Data and Resources
- You can check the data online by clicking **View** next to the HOSTS

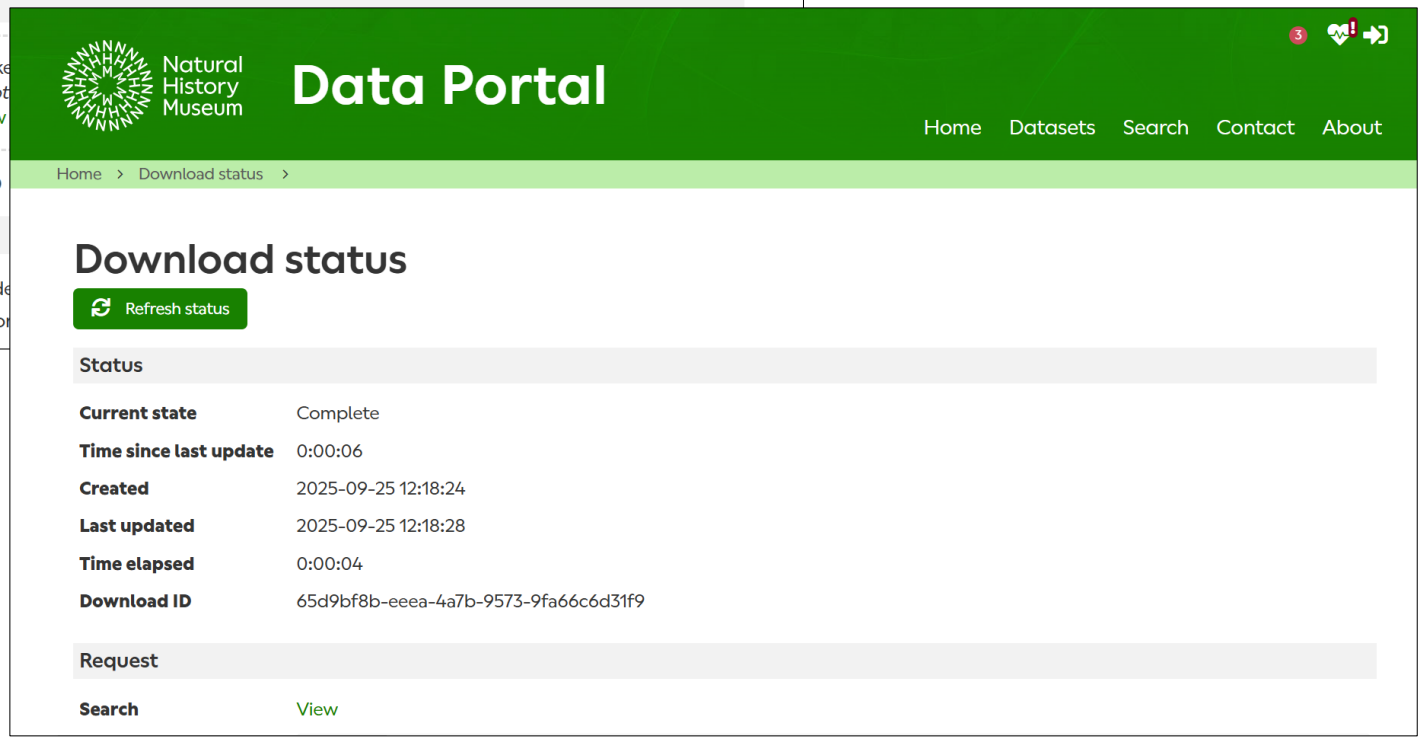
6. DATABASE OF THE WORLD'S LEPIDOPTERAN HOSTPLANTS



- To have an easy access of the data, you can download an Excel file by clicking on **Download** and then **Submit**

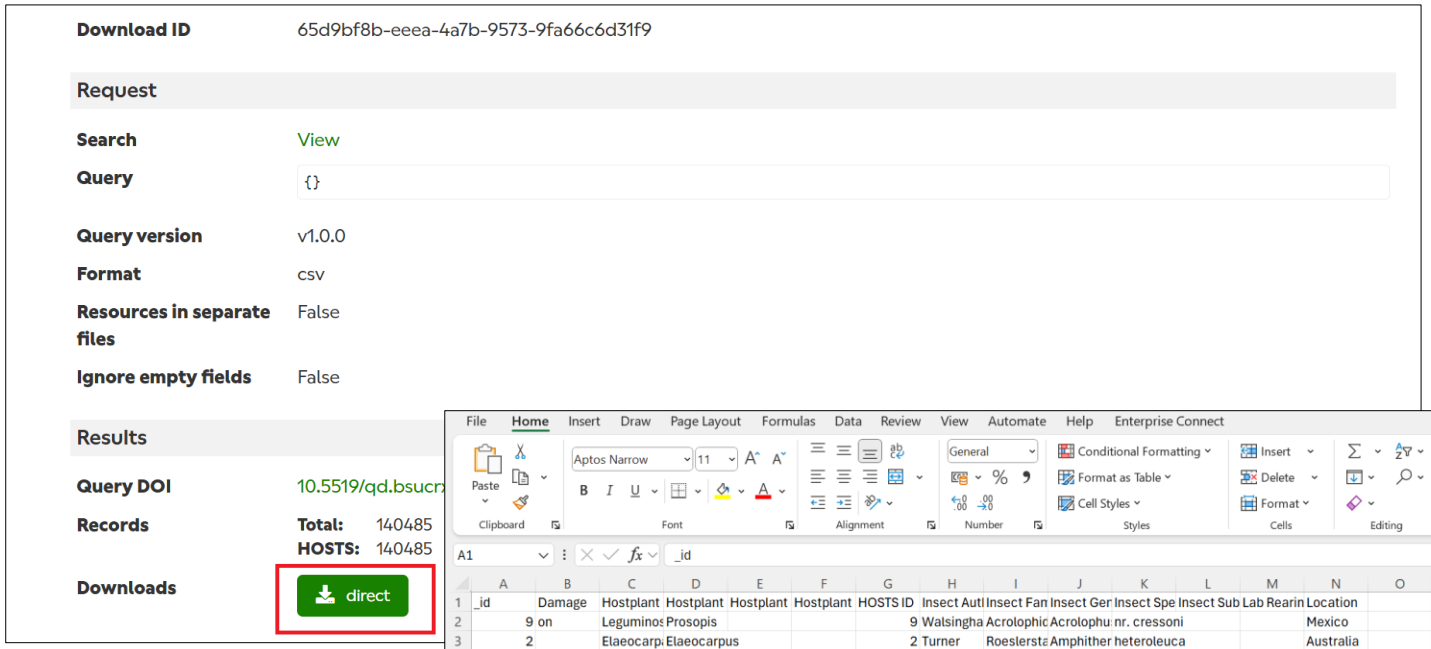
6. DATABASE OF THE WORLD'S LEPIDOPTERAN HOSTPLANTS

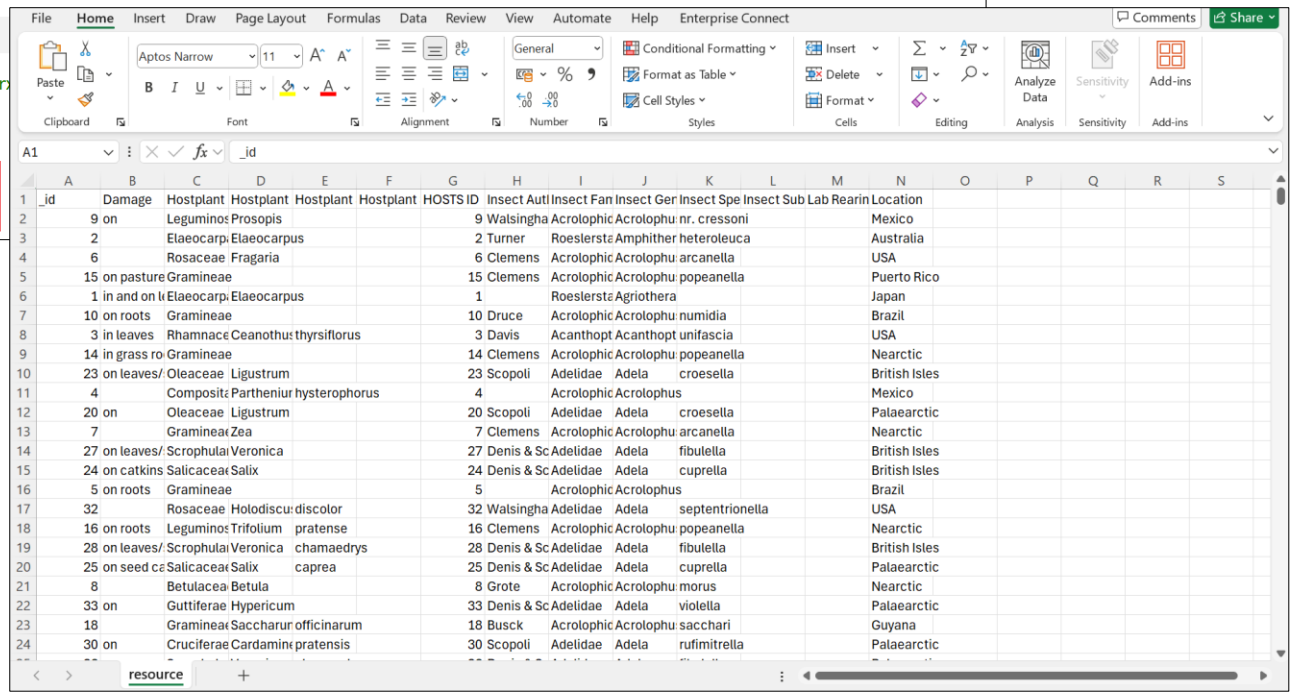




- Click on the **Download status** and a new page appears

6. DATABASE OF THE WORLD'S LEPIDOPTERAN HOSTPLANTS

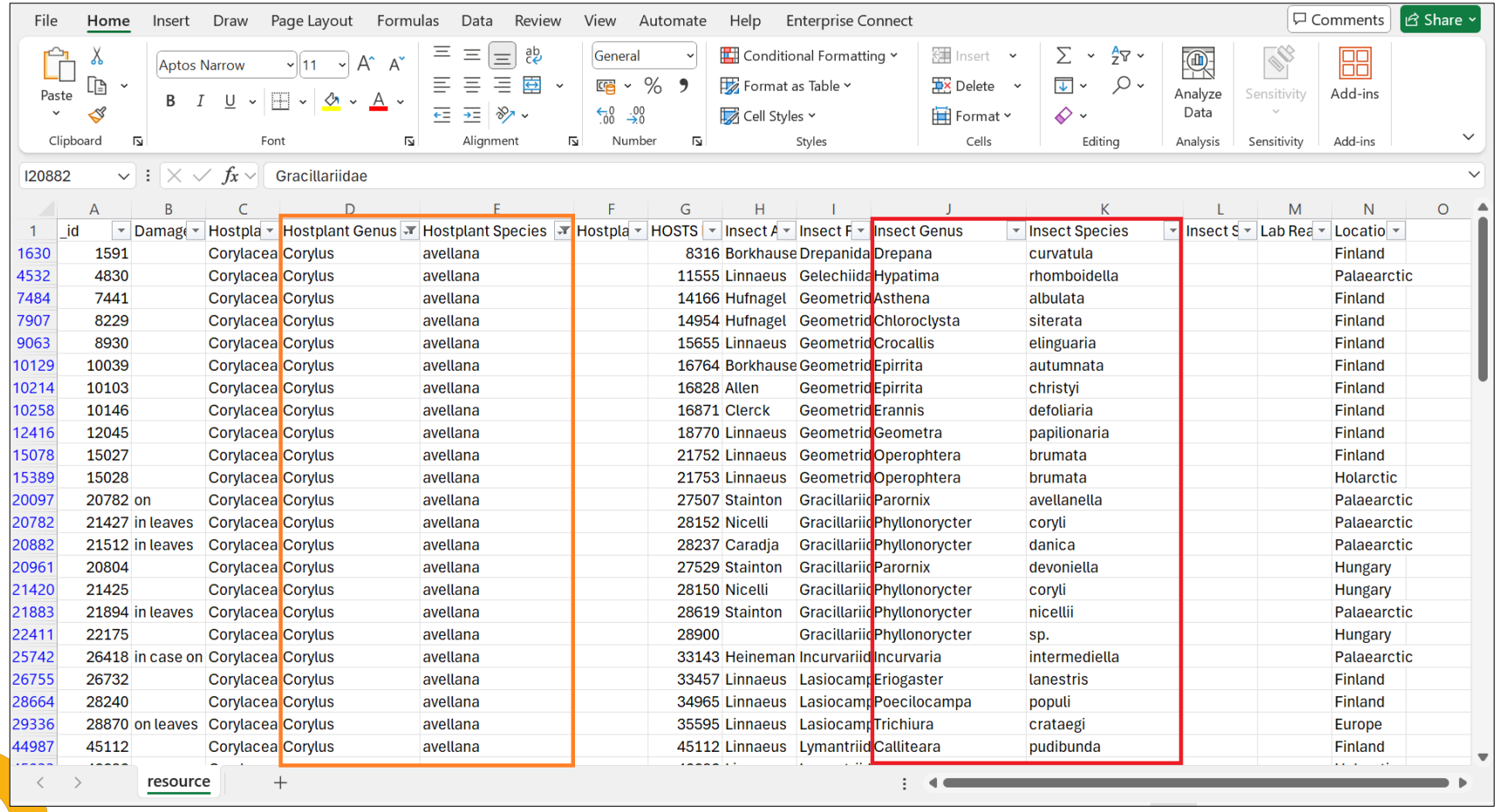




_id	Damage	Hostplant	Hostplant	Hostplant	Hostplant	HOSTS ID	Insect Aut	Insect Fan	Insect Ger	Insect Spe	Insect Sub	Lab Rearin	Location
9	on	Leguminos	Prosopis			9	Walsingha	Acrolophic	Acrolophu	nr. cressoni			Mexico
2		Elaeocarpi	Elaeocarpus			2	Turner	Roeslerst	Amphither	heteroleuca			Australia
6		Rosaceae	Fragaria			6	Clemens	Acrolophic	Acrolophu	arcanella			USA
15	on pasture	Gramineae				15	Clemens	Acrolophic	Acrolophu	popeanella			Puerto Rico
1	in and on l	Elaeocarpi	Elaeocarpus			1		Roeslerst	Agriothera				Japan
10	on roots	Gramineae				10	Druce	Acrolophic	Acrolophu	numidia			Brazil
3	in leaves	Rhamnace	Ceanothus	thyrsiflorus		3	Davis	Acanthopt	Acanthopt	unifascia			USA
14	in grass ro	Gramineae				14	Clemens	Acrolophic	Acrolophu	popeanella			Nearctic
23	on leaves/	Oleaceae	Ligustrum			23	Scopoli	Adelidae	Adela	croesella			British Isles
4		Composita	Partheniur	hysterophorus		4		Acrolophic	Acrolophus				Mexico
20	on	Oleaceae	Ligustrum			20	Scopoli	Adelidae	Adela	croesella			Palaearctic
7		Gramineae	Zea			7	Clemens	Acrolophic	Acrolophu	arcanella			Nearctic
27	on leaves/	Scrophulai	Veronica			27	Denis & Sc	Adelidae	Adela	fibulella			British Isles
24	on catkins	Salicaceae	Salix			24	Denis & Sc	Adelidae	Adela	cuprella			British Isles
5	on roots	Gramineae				5		Acrolophic	Acrolophus				Brazil
32		Rosaceae	Holodiscu	discolor		32	Walsingha	Adelidae	Adela	septentrionella			USA
16	on roots	Leguminos	Trifolium	pratense		16	Clemens	Acrolophic	Acrolophu	popeanella			Nearctic
28	on leaves/	Scrophulai	Veronica	chamaedrys		28	Denis & Sc	Adelidae	Adela	fibulella			British Isles
25	on seed ca	Salicaceae	Salix	caprea		25	Denis & Sc	Adelidae	Adela	cuprella			Palaearctic
8		Betulacea	Betula			8	Grote	Acrolophic	Acrolophu	morus			Nearctic
33	on	Guttiferae	Hypericum			33	Denis & Sc	Adelidae	Adela	violella			Palaearctic
18		Gramineae	Saccharur	officinarum		18	Busck	Acrolophic	Acrolophu	sacchari			Guyana
30	on	Cruciferae	Cardamin	pratensis		30	Scopoli	Adelidae	Adela	rufimitrella			Palaearctic

- Scroll down the new page and select **direct**
- A new zip file is downloaded
- Open the zip file and click on an Excel file called ‘resource’
- Now you have the whole dataset of the database

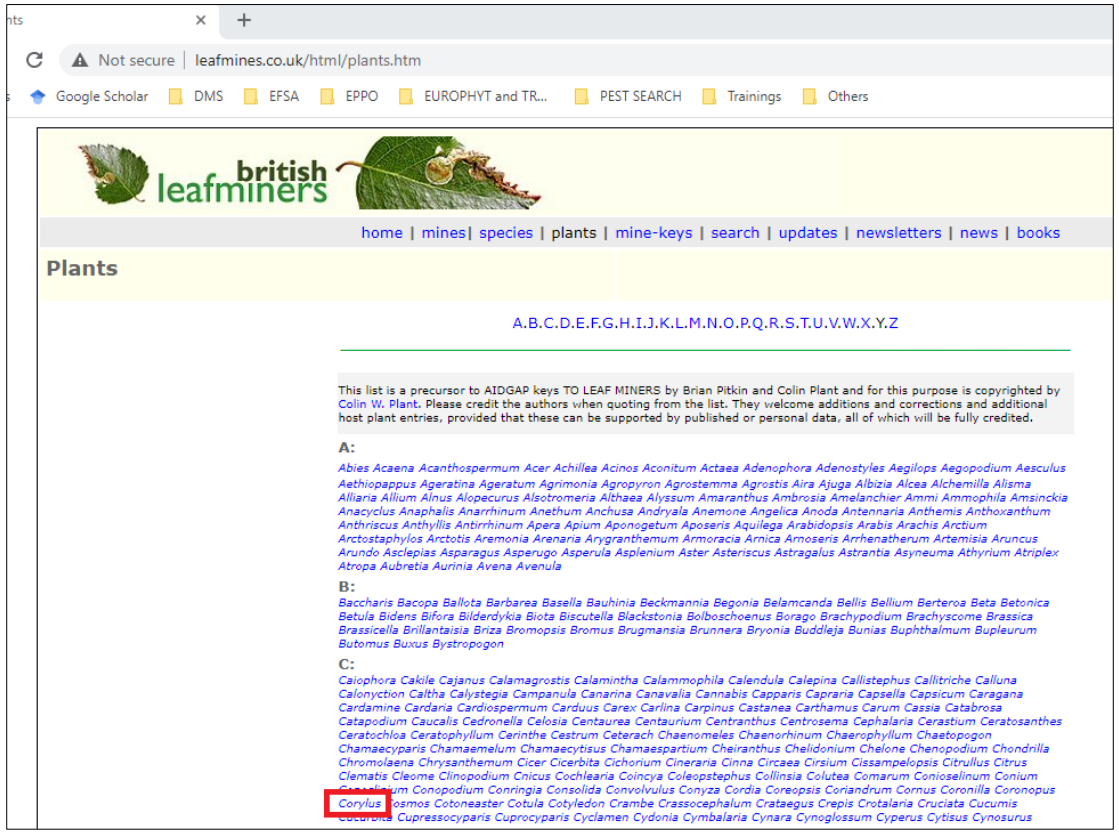
6. DATABASE OF THE WORLD'S LEPIDOPTERAN HOSTPLANTS

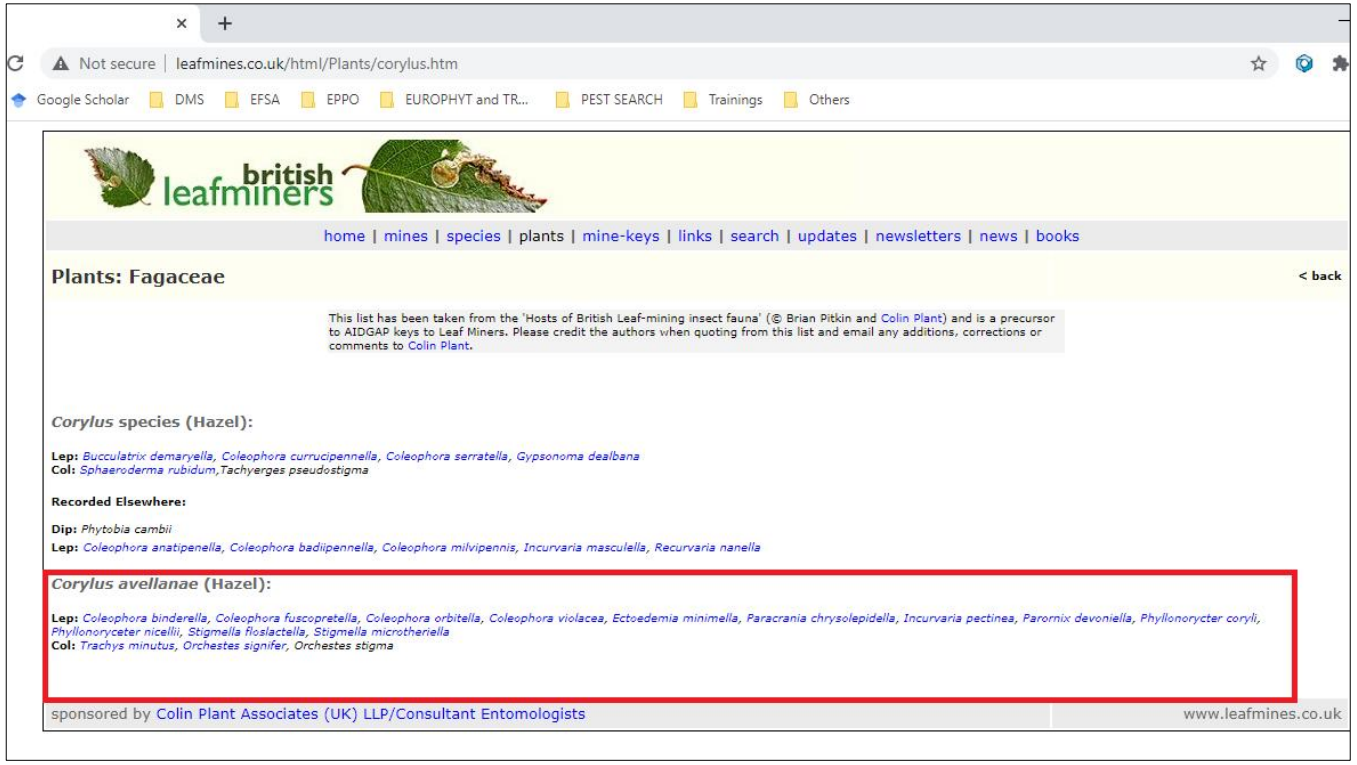


_id	Damage	Hostpla	Hostplant Genus	Hostplant Species	Hostpla	HOSTS	Insect A	Insect F	Insect Genus	Insect Species	Insect S	Lab Rea	Locatio
1591		Corylacea	Corylus	avellana		8316	Borkhause	Drepanida	Drepana	curvatula			Finland
4830		Corylacea	Corylus	avellana		11555	Linnaeus	Gelechiida	Hypatima	rhomboidella			Palaearctic
7441		Corylacea	Corylus	avellana		14166	Hufnagel	Geometrid	Asthena	albulata			Finland
8229		Corylacea	Corylus	avellana		14954	Hufnagel	Geometrid	Chloroclysta	siterata			Finland
8930		Corylacea	Corylus	avellana		15655	Linnaeus	Geometrid	Crocallis	elinguaria			Finland
10039		Corylacea	Corylus	avellana		16764	Borkhause	Geometrid	Epirrita	autumnata			Finland
10103		Corylacea	Corylus	avellana		16828	Allen	Geometrid	Epirrita	christyi			Finland
10146		Corylacea	Corylus	avellana		16871	Clerck	Geometrid	Erannis	defoliaria			Finland
12045		Corylacea	Corylus	avellana		18770	Linnaeus	Geometrid	Geometra	papilionaria			Finland
15027		Corylacea	Corylus	avellana		21752	Linnaeus	Geometrid	Operophtera	brumata			Finland
15028		Corylacea	Corylus	avellana		21753	Linnaeus	Geometrid	Operophtera	brumata			Holarctic
20782	on	Corylacea	Corylus	avellana		27507	Stainton	Gracillariid	Parornix	avellanella			Palaearctic
21427	in leaves	Corylacea	Corylus	avellana		28152	Nicelli	Gracillariid	Phyllonorycter	coryli			Palaearctic
21512	in leaves	Corylacea	Corylus	avellana		28237	Caradja	Gracillariid	Phyllonorycter	danica			Palaearctic
20804		Corylacea	Corylus	avellana		27529	Stainton	Gracillariid	Parornix	devoniella			Hungary
21425		Corylacea	Corylus	avellana		28150	Nicelli	Gracillariid	Phyllonorycter	coryli			Hungary
21894	in leaves	Corylacea	Corylus	avellana		28619	Stainton	Gracillariid	Phyllonorycter	nicellii			Palaearctic
22175		Corylacea	Corylus	avellana		28900		Gracillariid	Phyllonorycter	sp.			Hungary
26418	in case on	Corylacea	Corylus	avellana		33143	Heineman	Incurvariid	Incurvaria	intermediella			Palaearctic
26732		Corylacea	Corylus	avellana		33457	Linnaeus	Lasiocamp	Eriogaster	lanestris			Finland
28240		Corylacea	Corylus	avellana		34965	Linnaeus	Lasiocamp	Poecilocampa	populi			Finland
28870	on leaves	Corylacea	Corylus	avellana		35595	Linnaeus	Lasiocamp	Trichiura	crataegi			Europe
45112		Corylacea	Corylus	avellana		45112	Linnaeus	Lymantriid	Calliteara	pudibunda			Finland

- Filter for a commodity species/genus
  - As an example: *Corylus avellana*
- Retrieve and add all pests to the **Mother document** (specifying the source database)

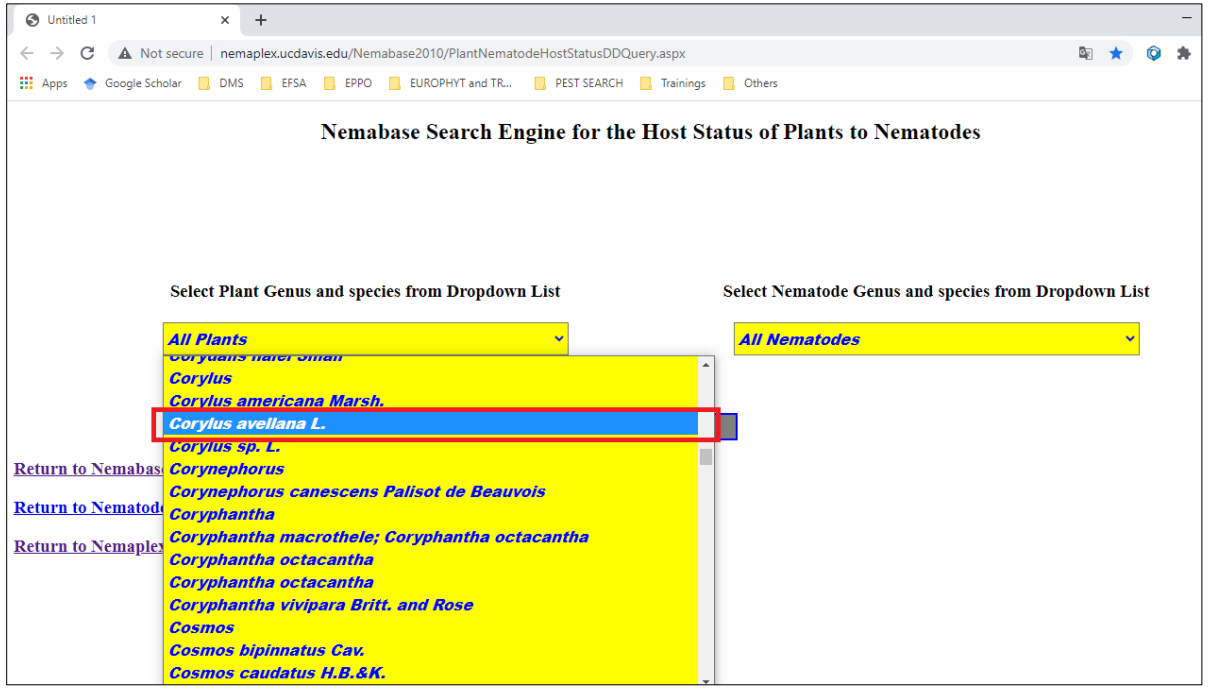
7. LEAF-MINERS

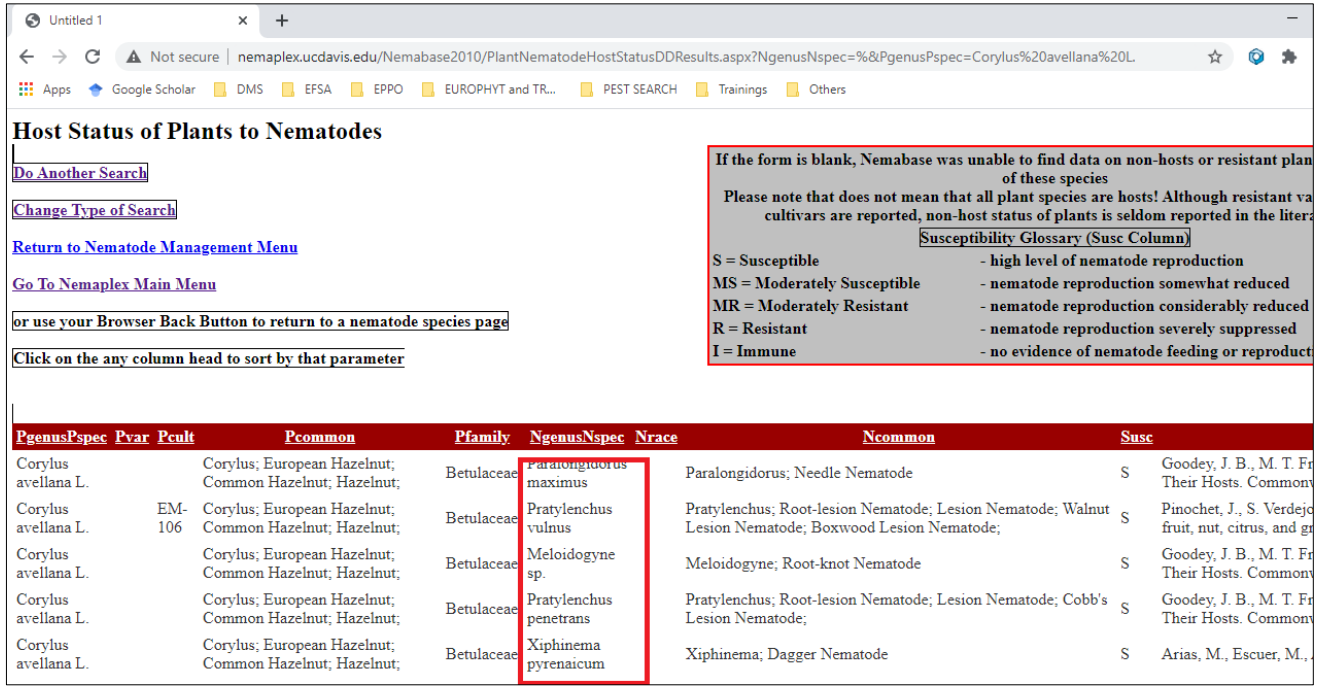




- Go to the database (here)
- Look for plant genus and plant species (e.g., *Corylus*, *Corylus avellana*)
- Retrieve and add all pests to the **Mother document** (specifying the source database)

8. NEMAPLEX



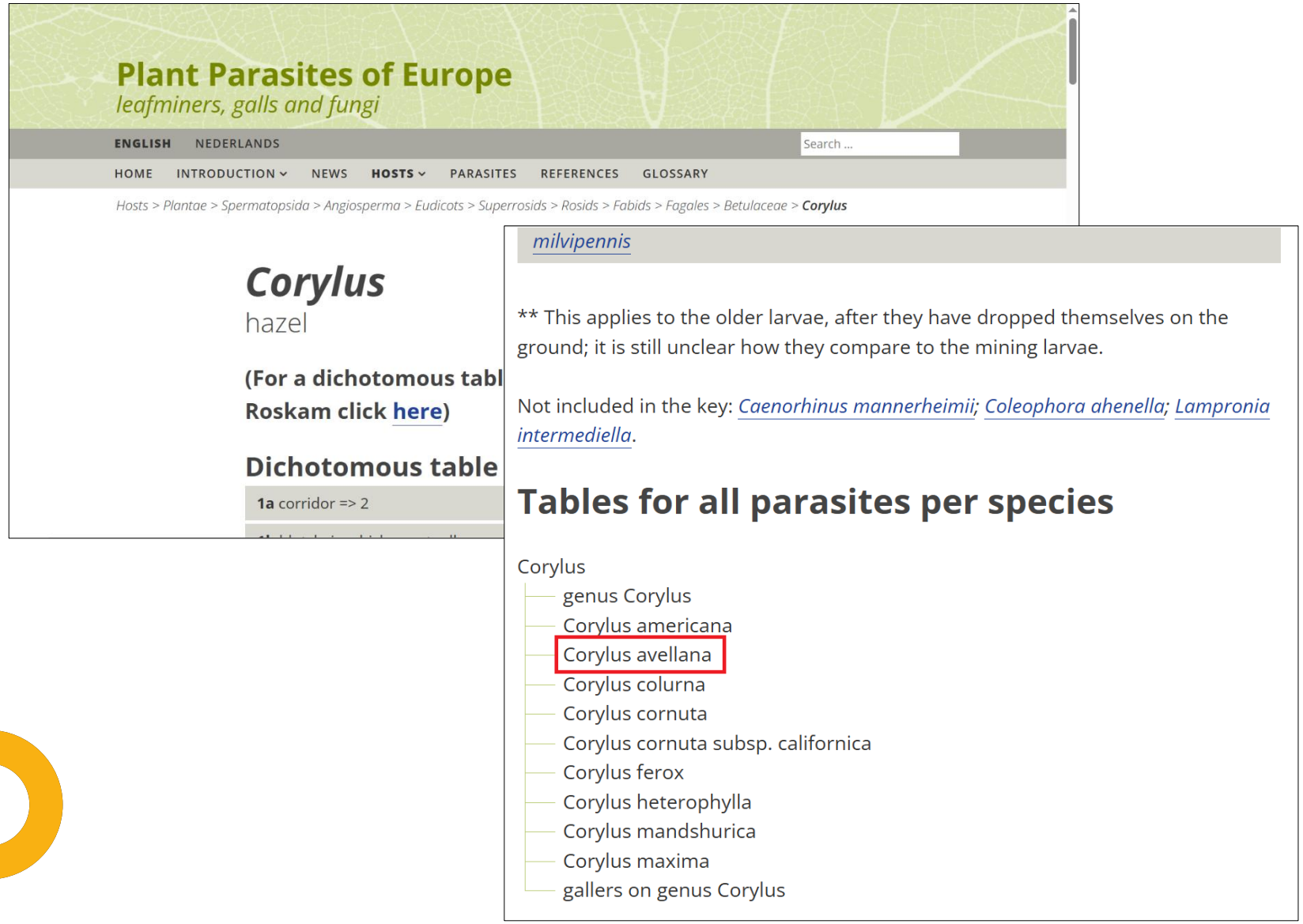


- Go to the database (here)
- Look for plant species (e.g., *Corylus avellana*)
- Retrieve and add all pests to the **Mother document** (specifying the source database)

9. PLANT PARASITES OF EUROPE

- Go to the database (here)
- Look for plant genus (e.g., *Corylus*)

9. PLANT PARASITES OF EUROPE



- Scroll down to the Table for all parasites per species
- Select the plant species (e.g., *Corylus avellana*)

9. PLANT PARASITES OF EUROPE

Corylus avellana

ENGLISH VERNACULAR NAME

hazel

DUTCH VERNACULAR NAME

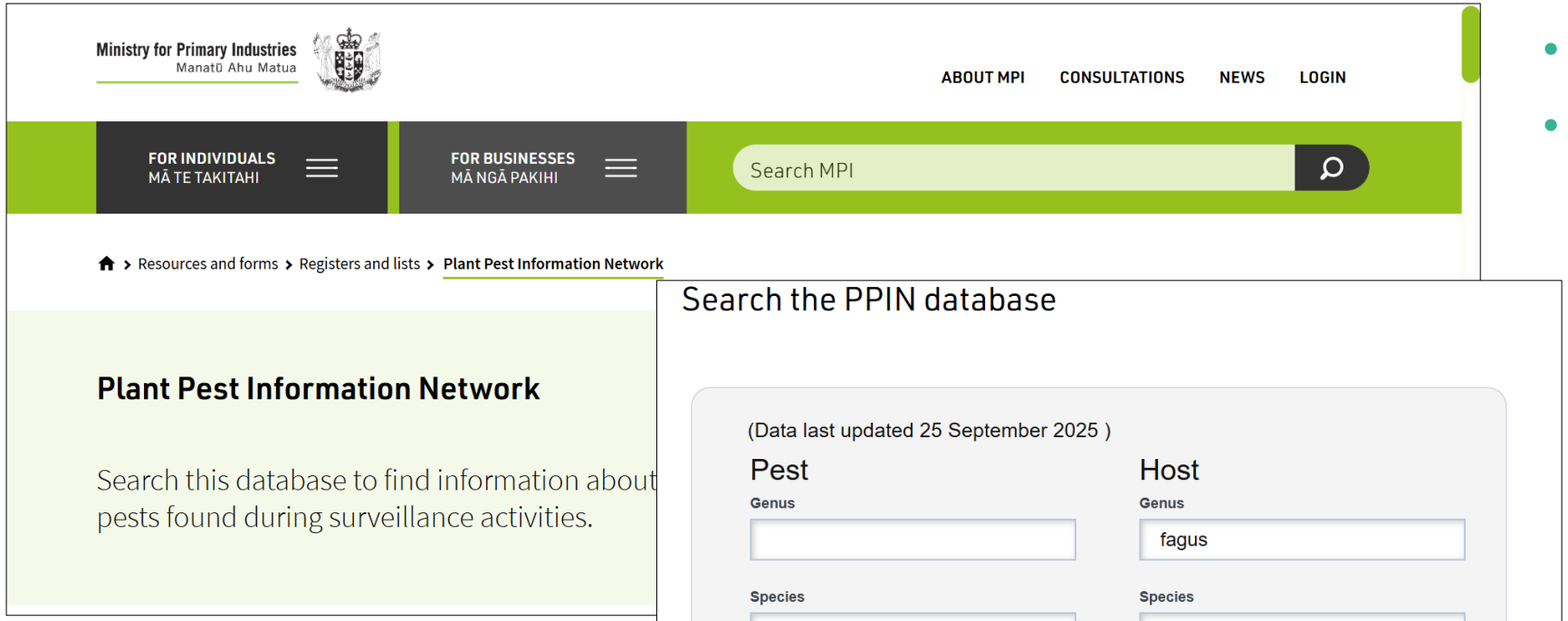
hazelaar

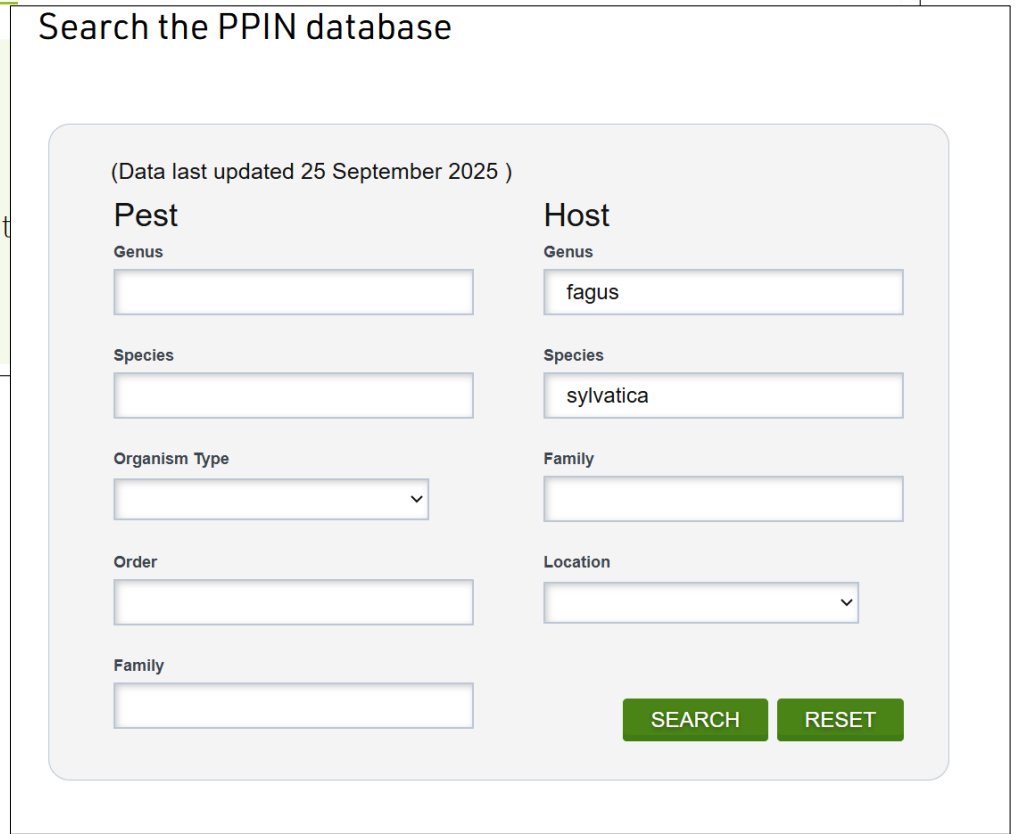
Filter

ORGAN	MODE	STAGE	MAIN GROUP	GROUP	FAMILY	PARASITE	P	G	S
	predator		Insecta	Hemiptera Heteroptera	Miridae	*Campyloneura virgula*		24	26
	inquiline		Acari	Eriophyoidea	Eriophyidae	*Cecidophyopsis vermiformis*		3	3
			Insecta	Coleoptera	Curculionidae	*Curculio elephas*		3	10
	predator		Insecta	Hemiptera Heteroptera	Miridae	*Deraeocoris lutescens*		16	20

- Retrieve and add all pests to the **Mother document** (specifying the source database)

10. PLANT PEST INFORMATION NETWORK





- Go to the database (here)
- Look for plant species (in this case, *Fagus sylvatica* was used as an example, because hazelnut was not available in this database)

10. PLANT PEST INFORMATION NETWORK

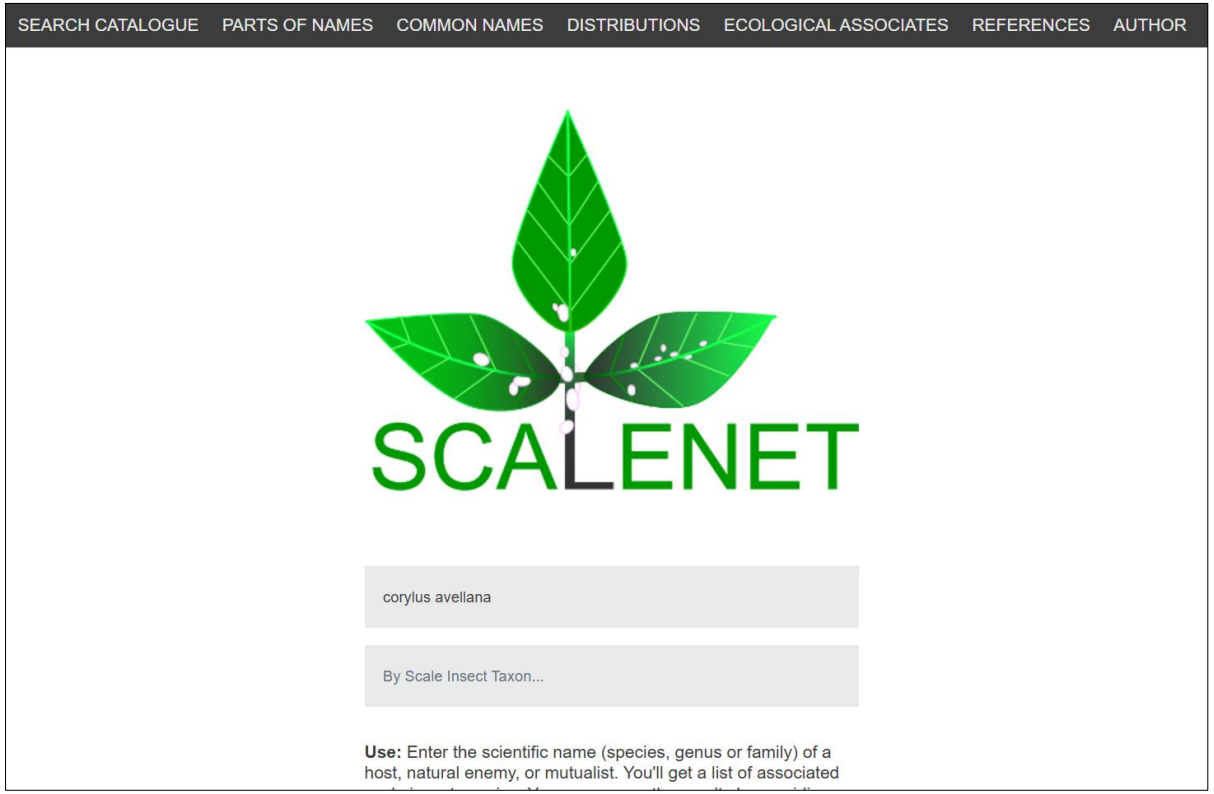
Search the PPIN database

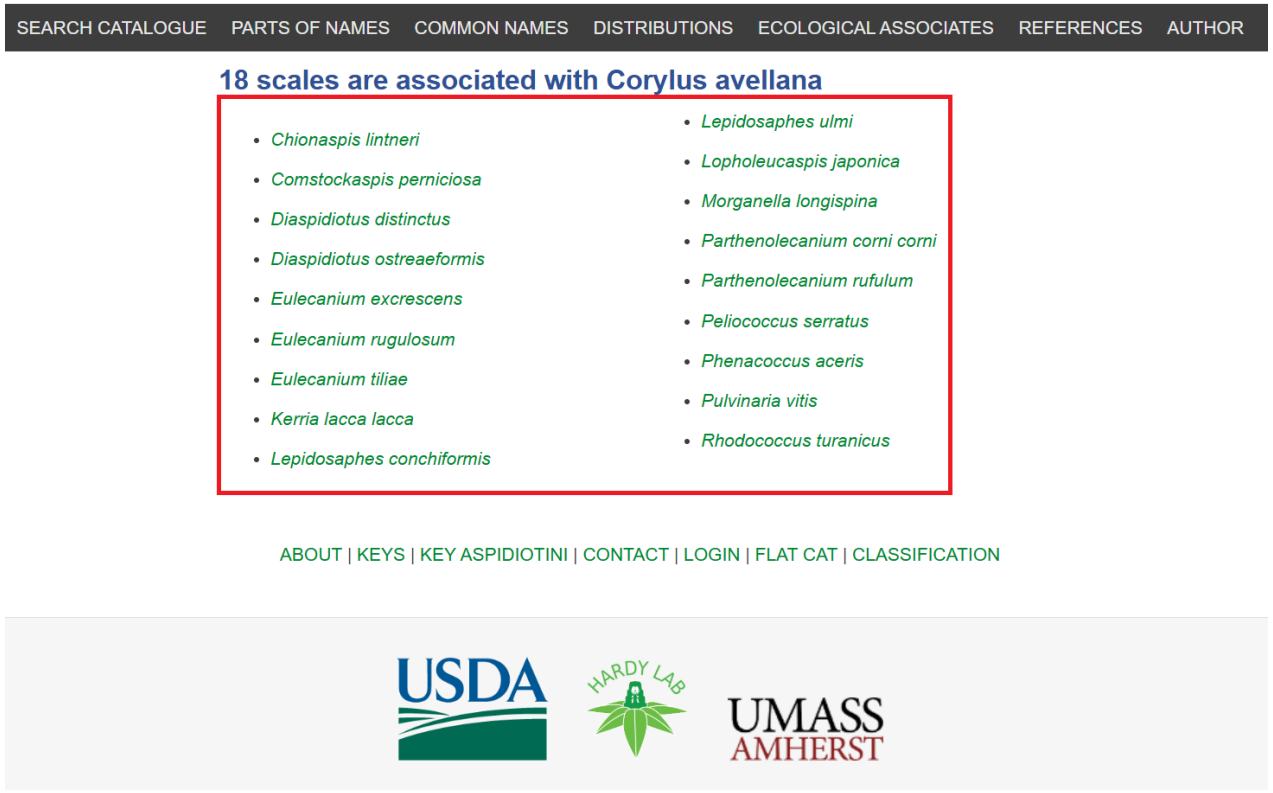
Perform another search Download results as .csv file

Pest Scientific Name	Pest Organism Type	Pest Order: Family	Host Scientific Name	Host Family	
Globisporangium rostratifingens	Chromista	Pythiales: Pythiaceae	*Fagus sylvatica*	Fagaceae	more>>
					more>>
					more>>
Agrocybe sp.	fungus	Other: Basidiomycetes	*Fagus* sp.	Fagaceae	more>>
Botryosphaeria dothidea (alternate state *Fusicoccum aesculi*) (synonym *Sphaeria dothidea*)	fungus	Other: Ascomycetes	*Fagus sylvatica*	Fagaceae	more>>
Colletotrichum fioriniae	fungus	Other: Glomerellaceae	*Fagus sylvatica*	Fagaceae	more>>
			Fagus sylvatica	Fagaceae	more>>

- Retrieve and add all pests to the **Mother document** (specifying the source database)

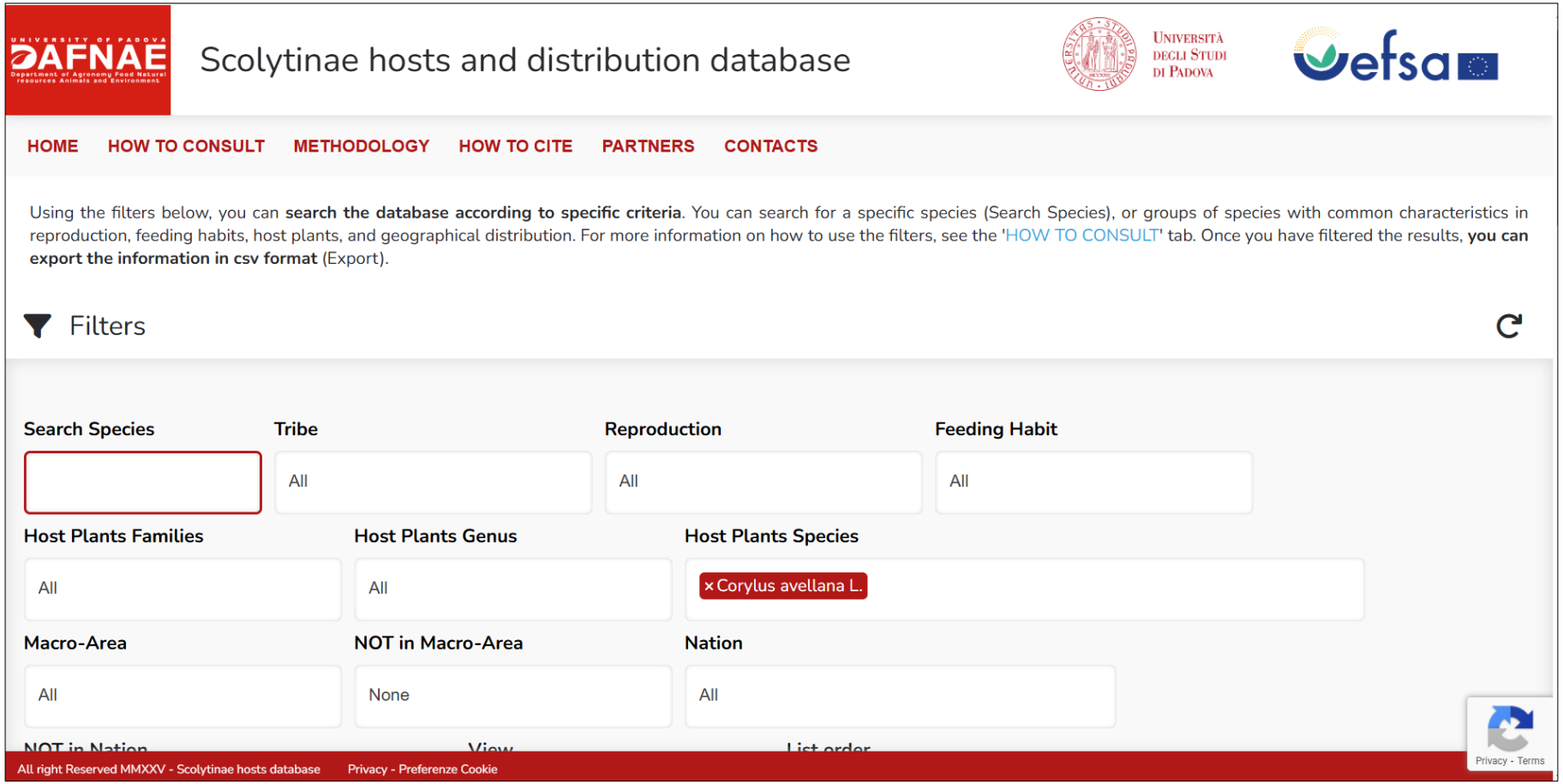
11. SCALENET





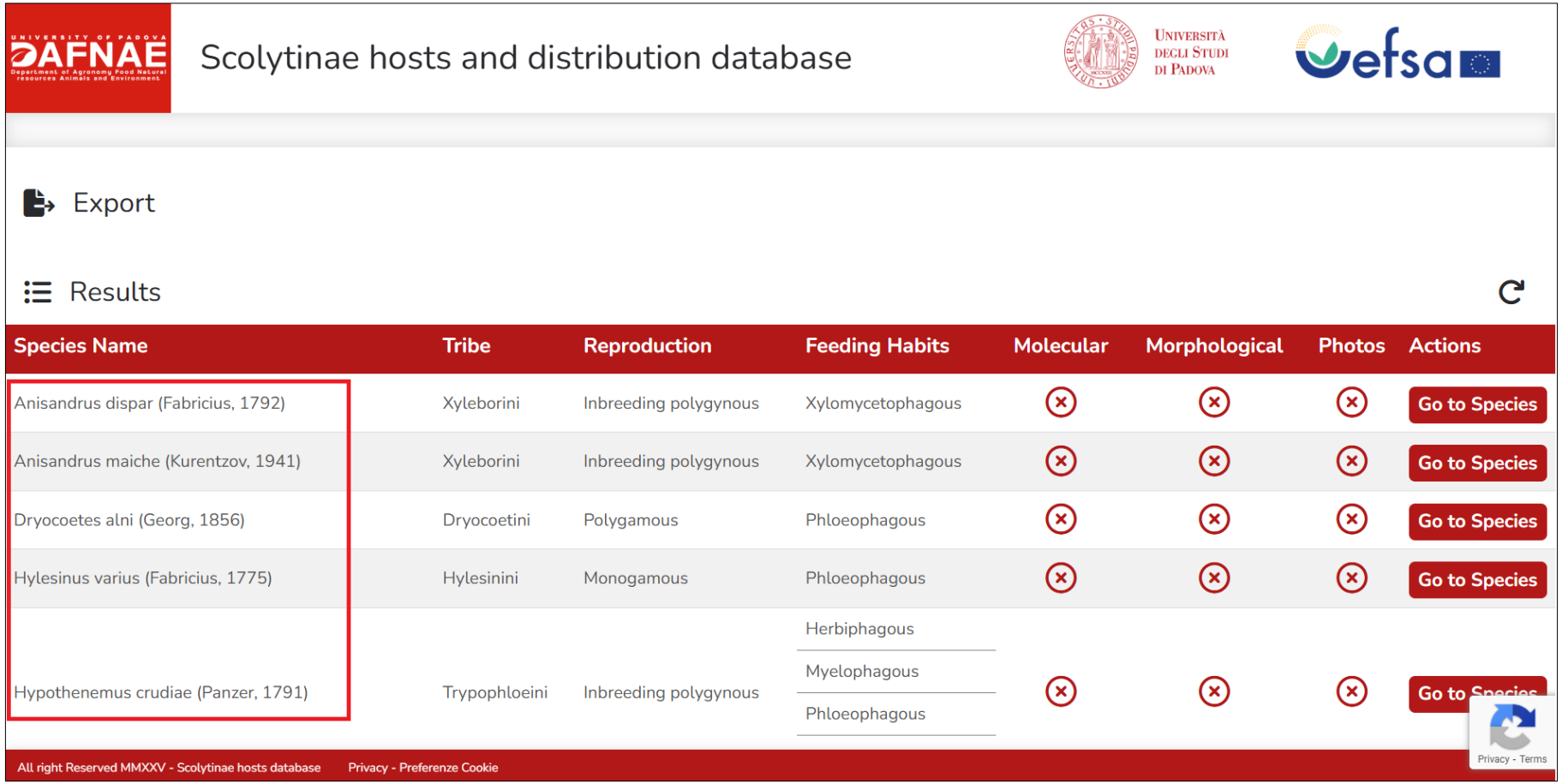
- Go to the database (here)
- Look for plant species (e.g., *Corylus avellana*)
- Retrieve and add pests to the **Mother document** (specifying the source database)

12. SCOLYTINAE HOSTS AND DISTRIBUTION DATABASE



- Go to the database (here)
- Look for plant species (e.g., *Corylus avellana*)

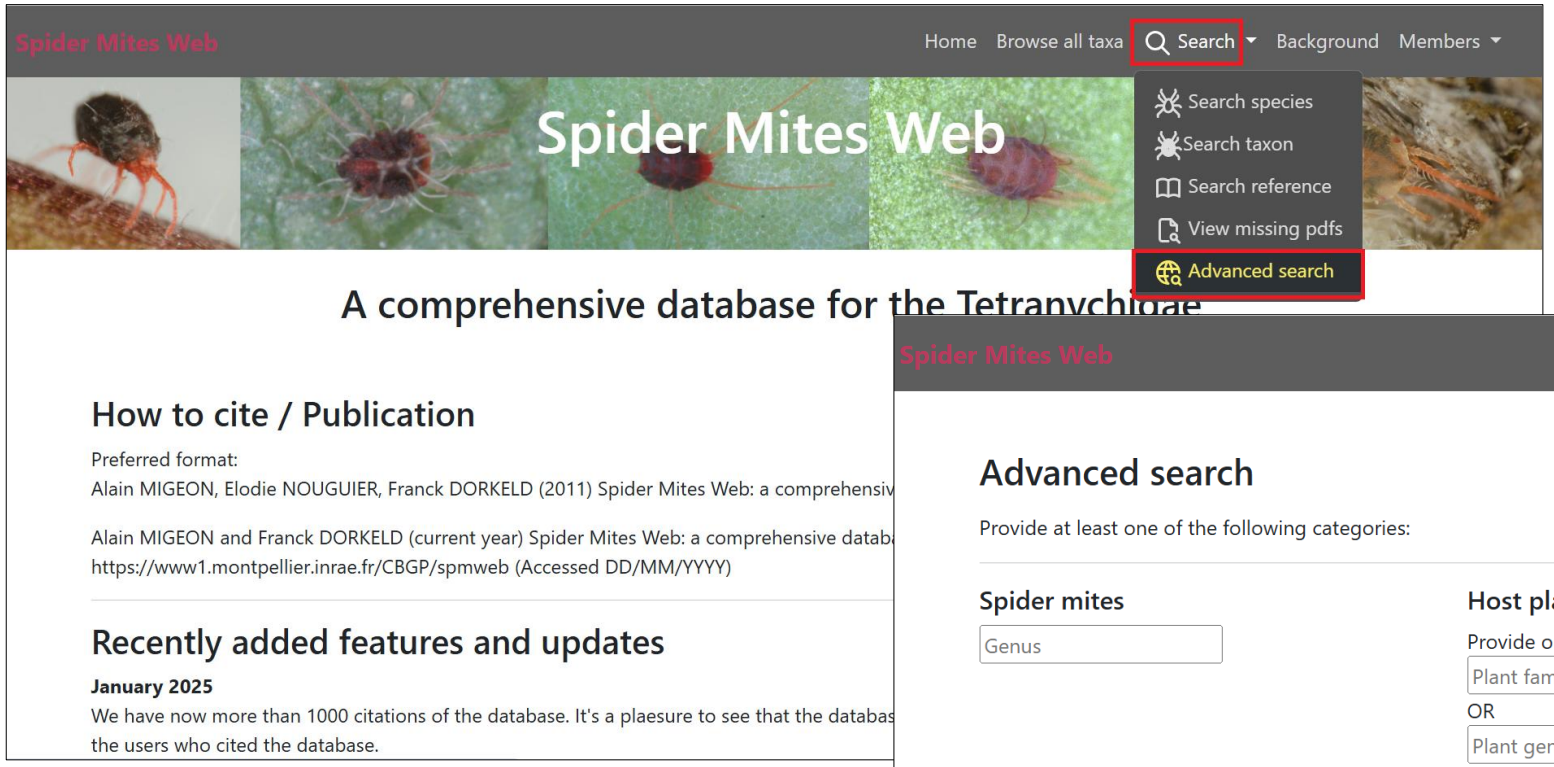
12. SCOLYTINAE HOSTS AND DISTRIBUTION DATABASE

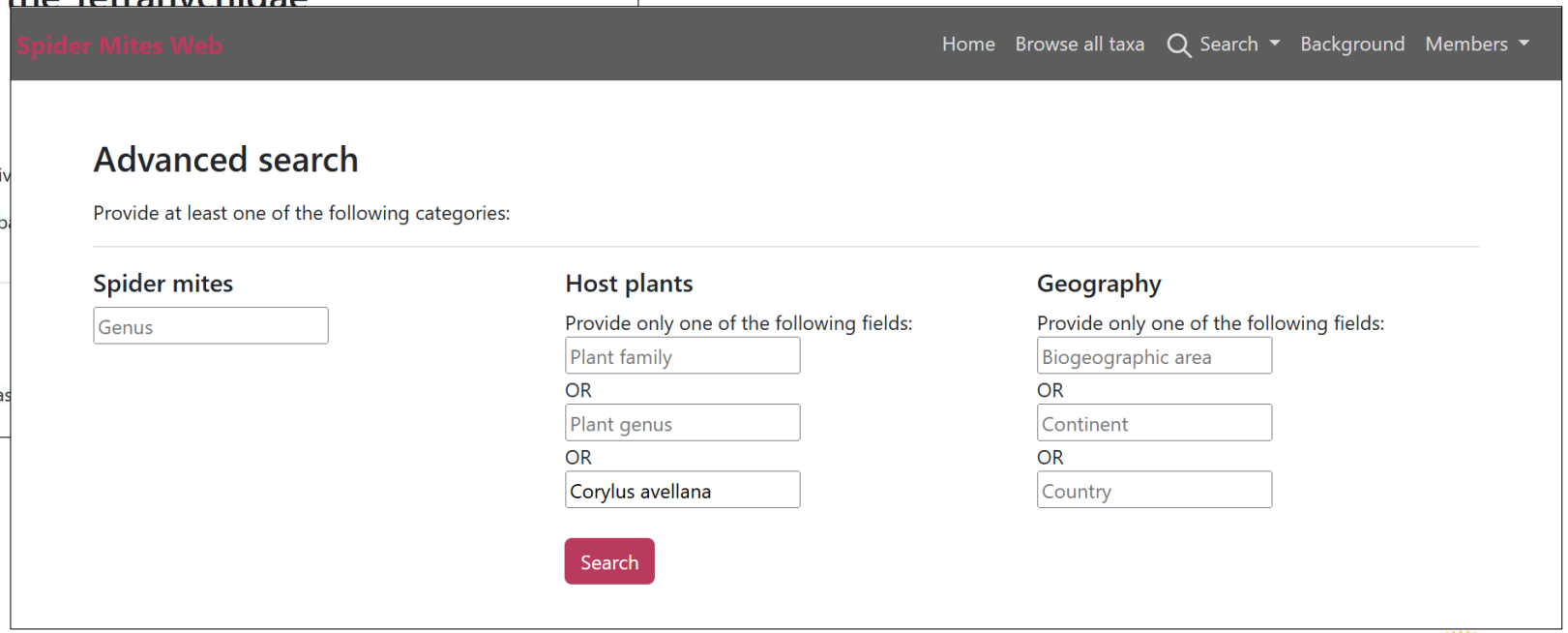


Species Name	Tribe	Reproduction	Feeding Habits	Molecular	Morphological	Photos	Actions
Anisandrus dispar (Fabricius, 1792)	Xyleborini	Inbreeding polygynous	Xylomycetophagous	⊗	⊗	⊗	Go to Species
Anisandrus maiche (Kurentzov, 1941)	Xyleborini	Inbreeding polygynous	Xylomycetophagous	⊗	⊗	⊗	Go to Species
Dryocoetes alni (Georg, 1856)	Dryocoetini	Polygamous	Phloeophagous	⊗	⊗	⊗	Go to Species
Hylesinus varius (Fabricius, 1775)	Hylesinini	Monogamous	Phloeophagous	⊗	⊗	⊗	Go to Species
Hypothenemus crudiae (Panzer, 1791)	Trypophloeini	Inbreeding polygynous	Herbiphagous Myelophagous Phloeophagous	⊗	⊗	⊗	Go to Species

- Scroll down to the results
- Retrieve and add pests to the **Mother document** (specifying the source database)

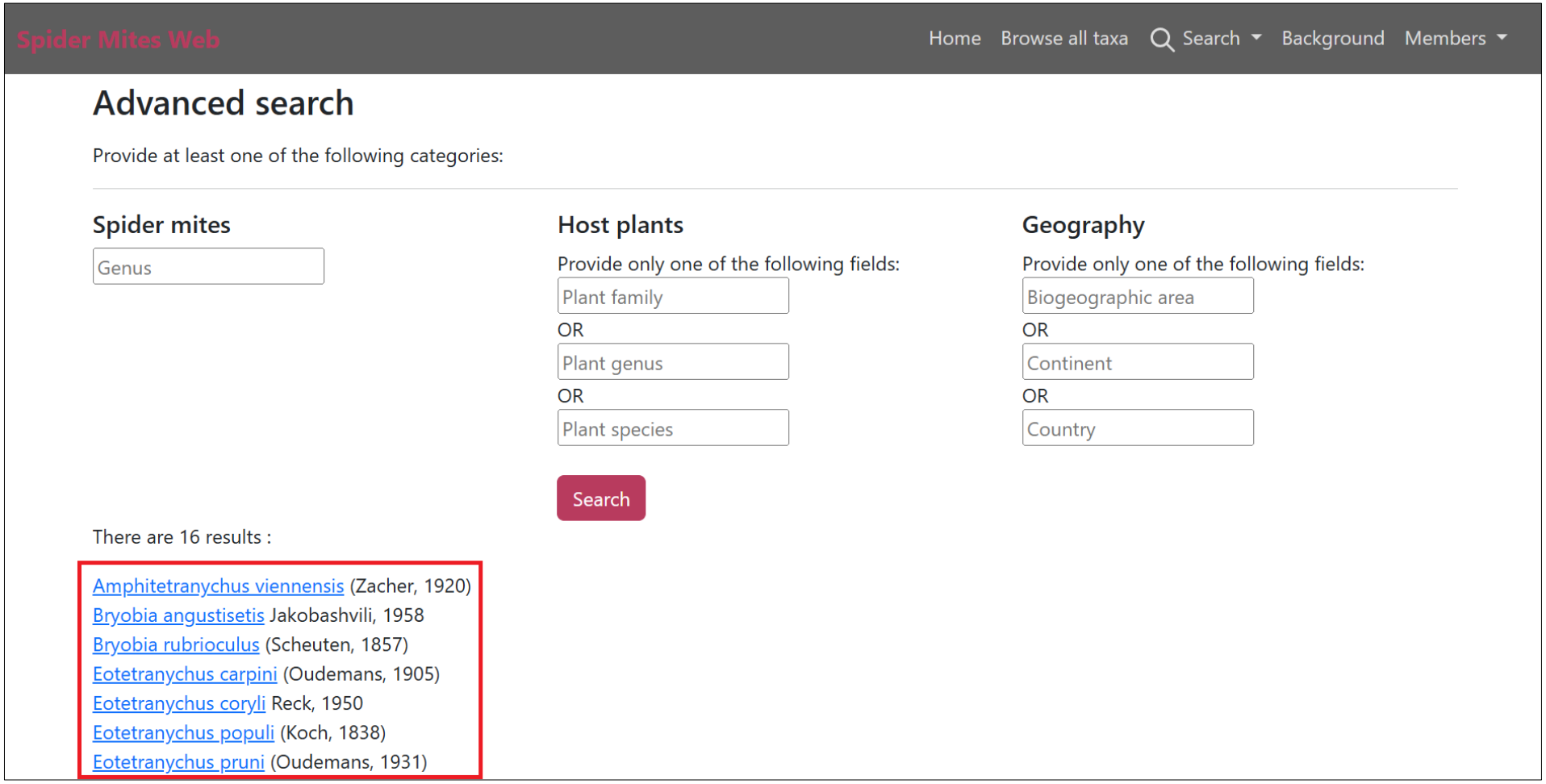
13. SPIDER MITES WEB





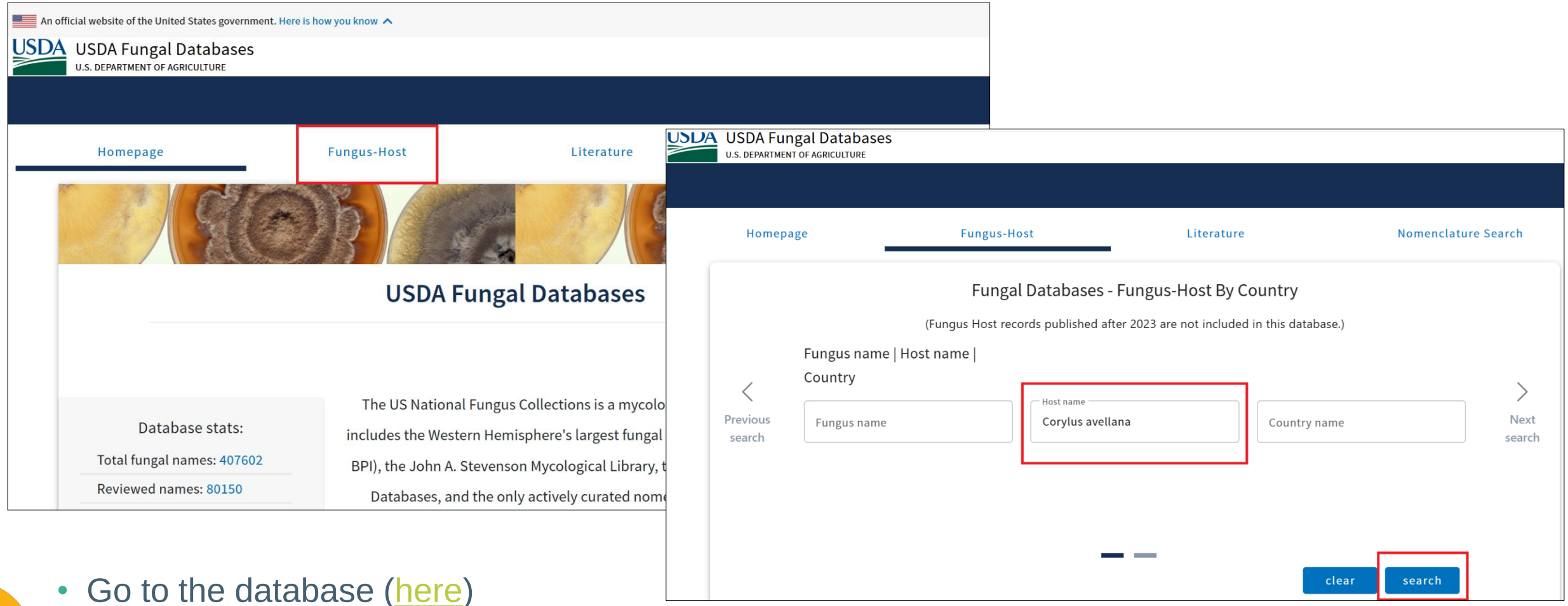
- Go to the database (here)
- Select **Search** and then **Advanced search**
- Scroll down and look for plant species (e.g., *Corylus avellana*)

13. SPIDER MITES WEB



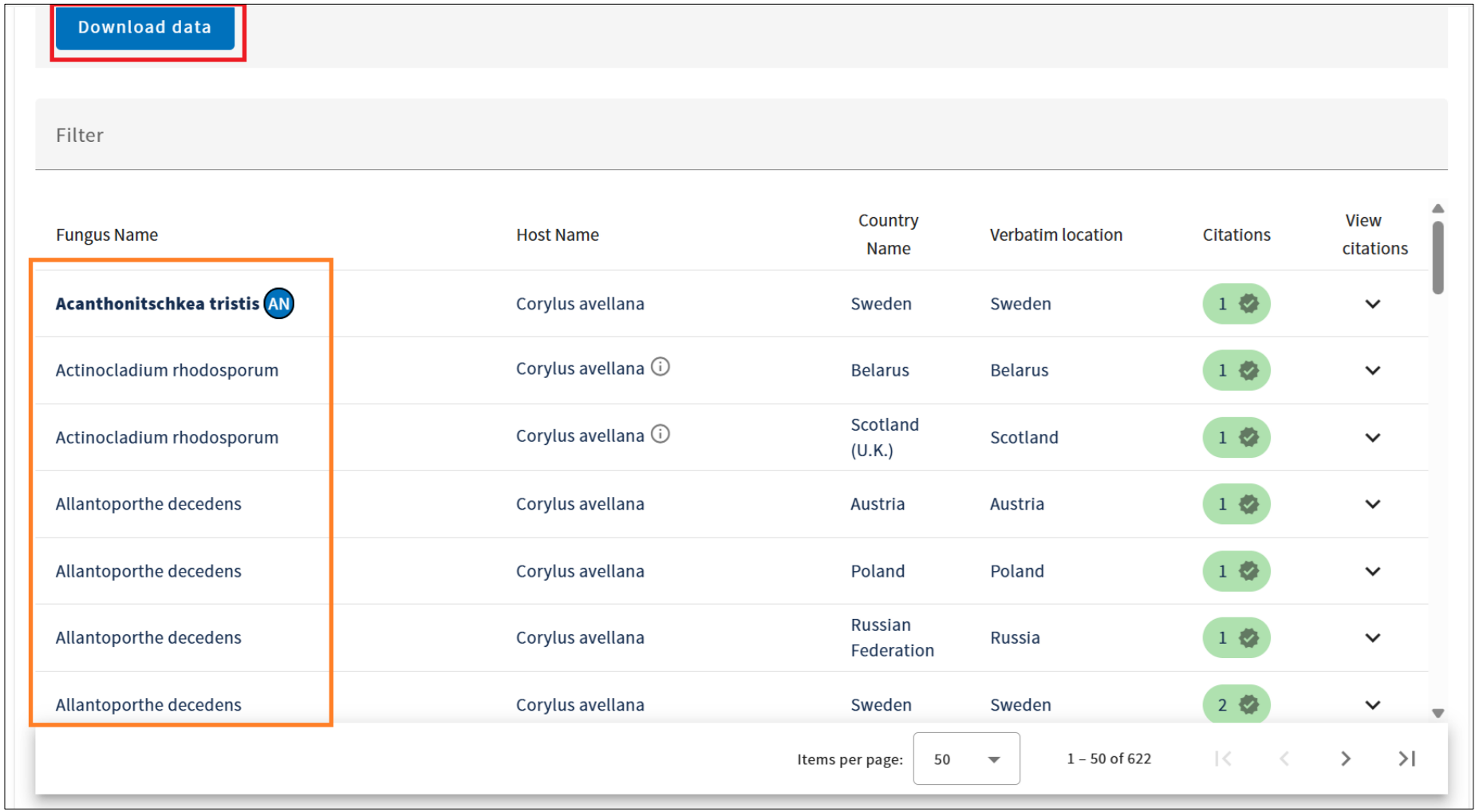
- Retrieve and add pests to the **Mother document** (specifying the source database)

14. USDA ARS FUNGI DATABASE



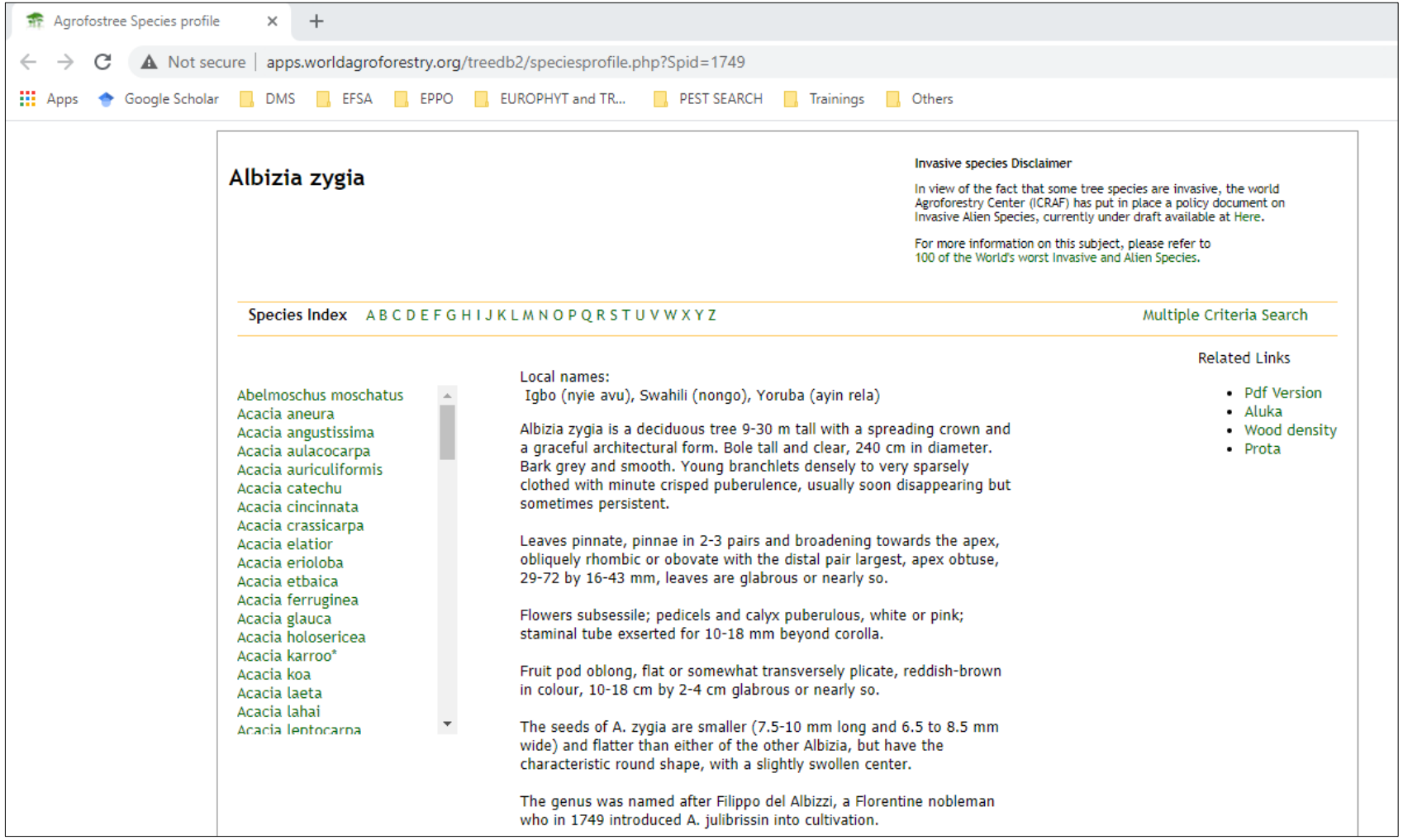
- Go to the database (here)
- Select Fungus-Host tab (**highlighted in red**)
- Look for plant species (e.g., *Corylus avellana*)

14. USDA ARS FUNGI DATABASE



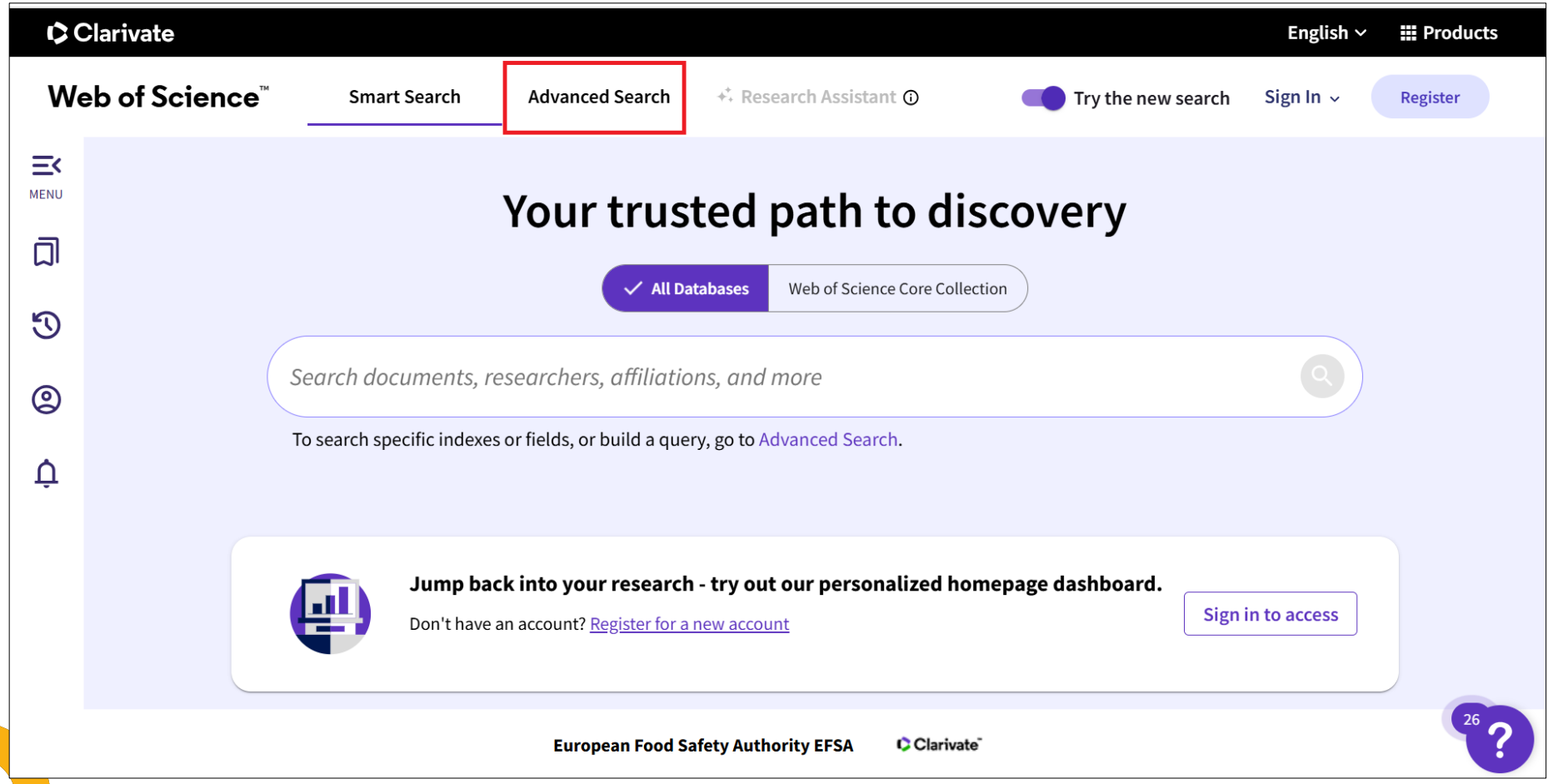
- Scroll down to see the **full list of pests**
- You can also download the data as an Excel file (Selecting **Download data**)

15. WORLD AGROFORESTRY



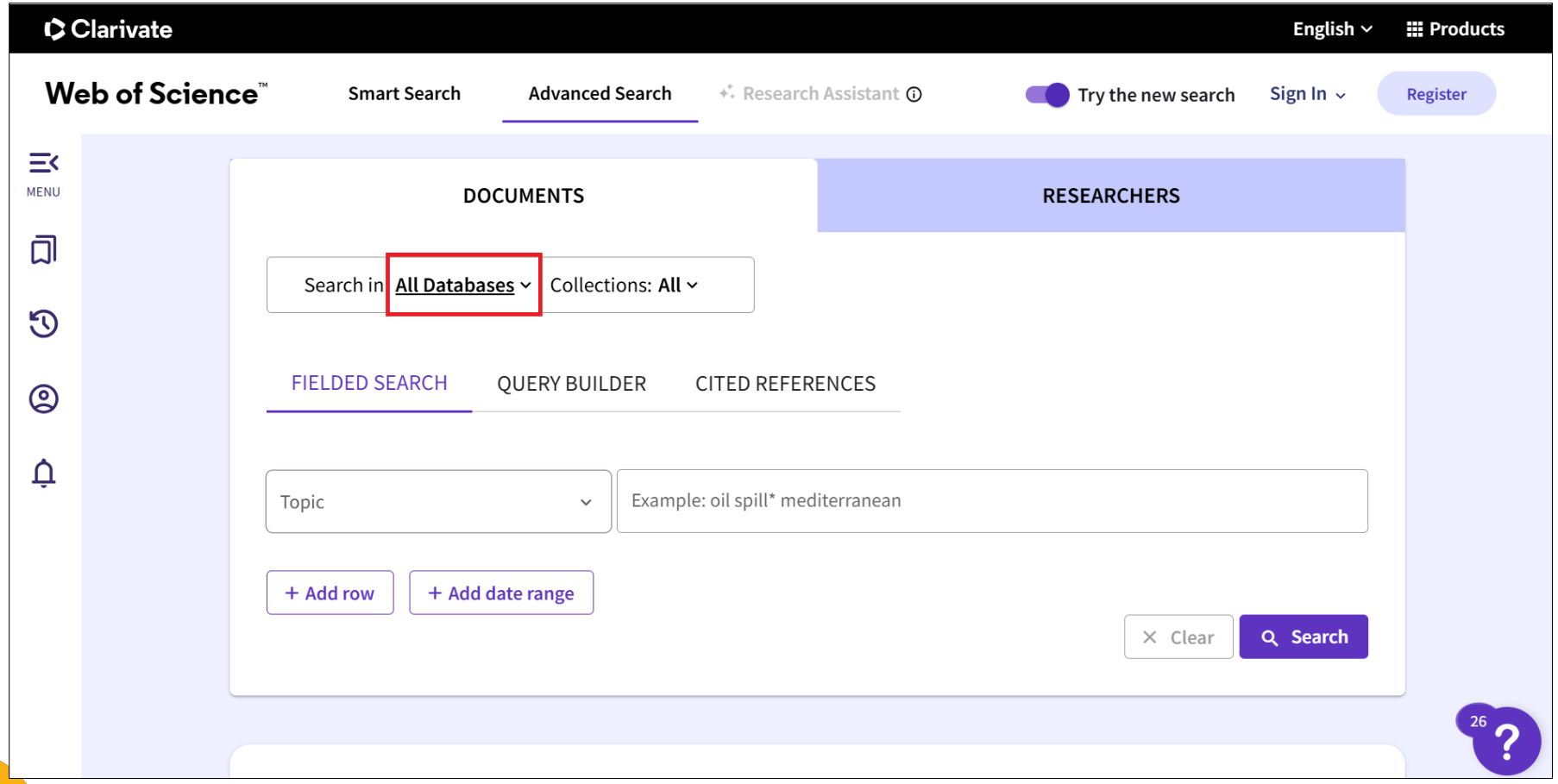
- Go to the database (here)
- Look for plant species (in this case, ***Albizia zygia*** was used as an example, because hazelnut was not available in this database)
- Pests may be mentioned in general information about the plant species

16. WEB OF SCIENCE



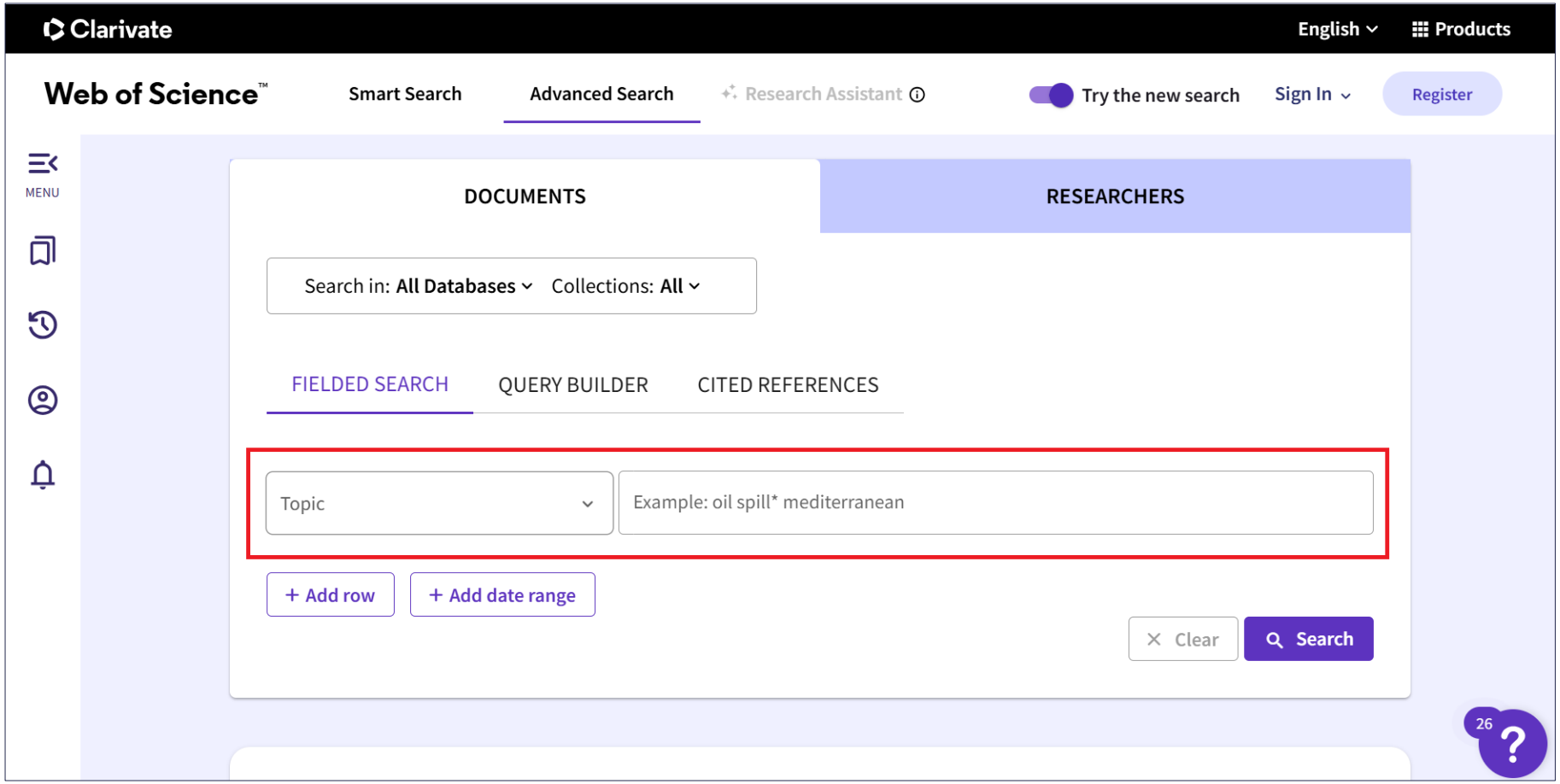
- Go to **Web of Science** (here)
- Log in through EFSA account
- Select **Advanced Search**

16. WEB OF SCIENCE



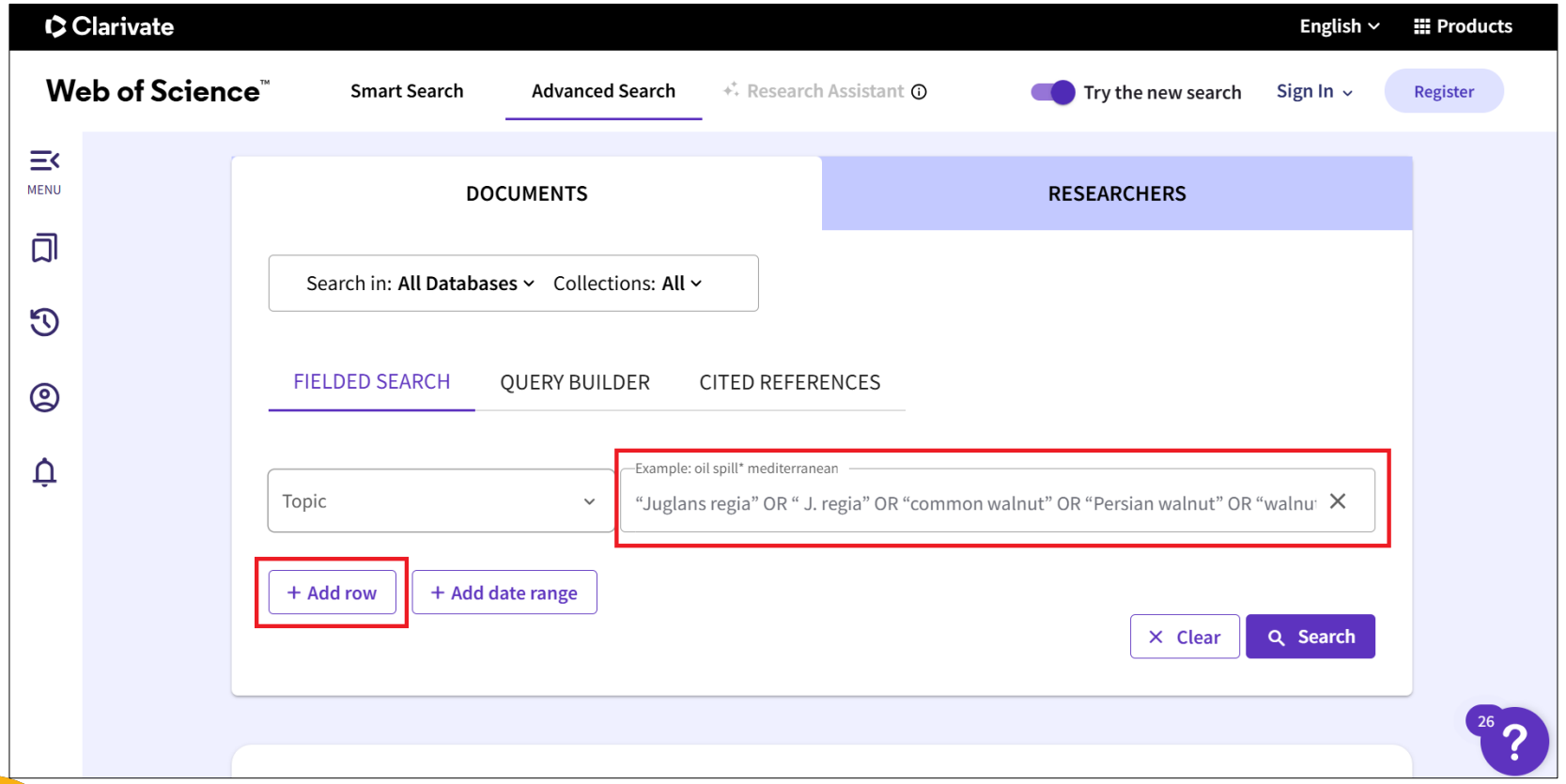
- In the Options of **Search in**, select **All Databases**

16. WEB OF SCIENCE



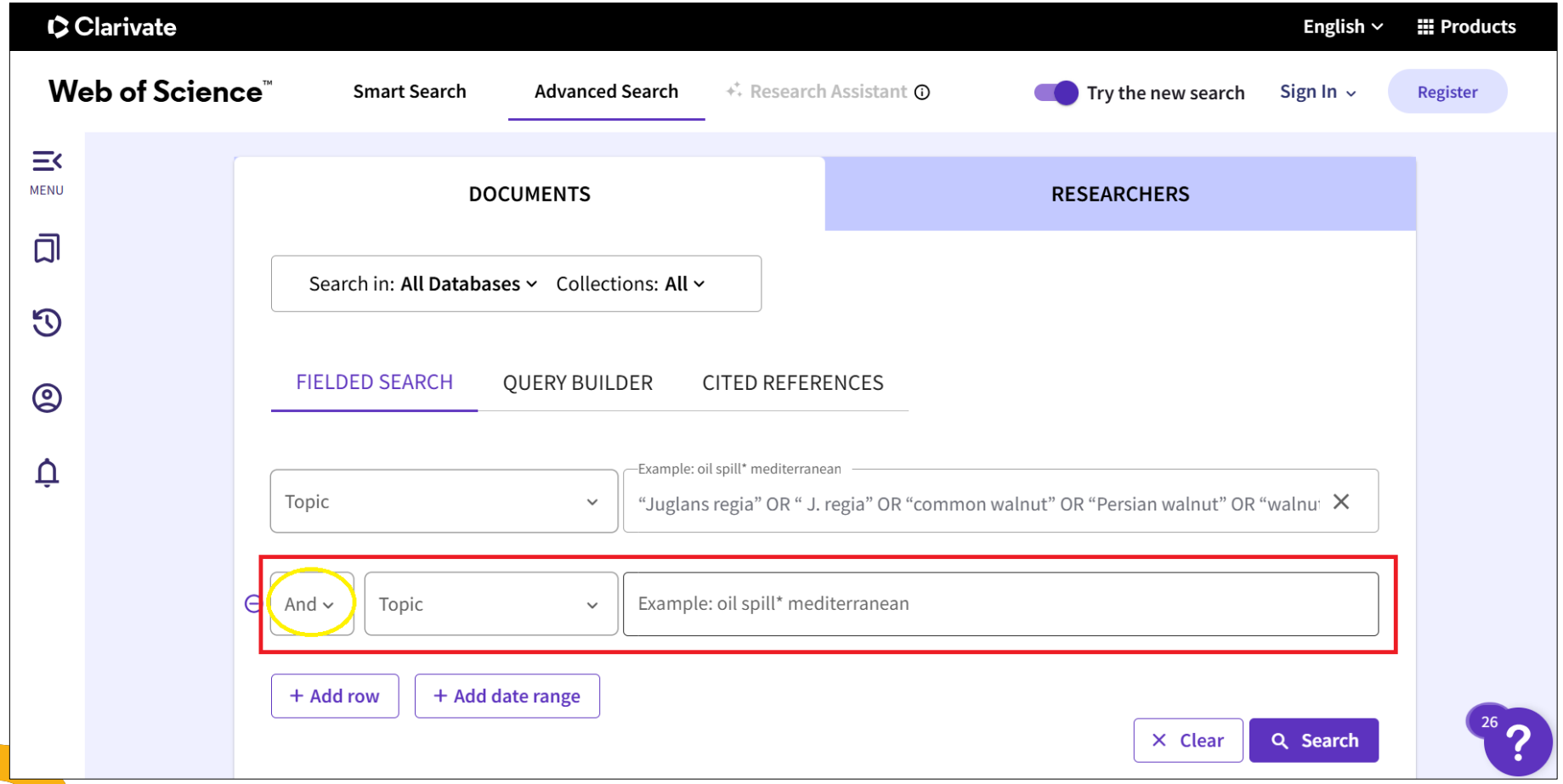
- Into the **highlighted column** (**TOPIC1**) insert Commodity species name with abbreviations and common names
- Synonyms of plant species can be found in Plants of the World online (here)
- Common names of plant species can be found in EPPO GD
- See the next slide as an example for *Juglans regia*

16. WEB OF SCIENCE – TOPIC1 STRING



- "Juglans regia" OR " J. regia" OR "common walnut" OR "Persian walnut" OR "walnut" OR "Juglans arguta" OR "Juglans asplenifolia" OR "Juglans dissecta" OR "Juglans duclouxiana" OR "Juglans fallax" OR "Juglans fertilis" OR "Juglans filicifolia" OR "Juglans frutescens" OR "Juglans fruticose" OR "Juglans heterophylla" OR "Juglans kamaonia" OR "Juglans laciniata" OR "Juglans longirostris" OR "Juglans monophyla" OR "Juglans orientis" OR "Juglans pendula" OR "Juglans praematuriens" OR "Juglans quercifolia" OR "Juglans salicifolia" OR "Juglans sinensis"
- Then select: **+ Add row** (a new line will appear – see next slide)

16. WEB OF SCIENCE

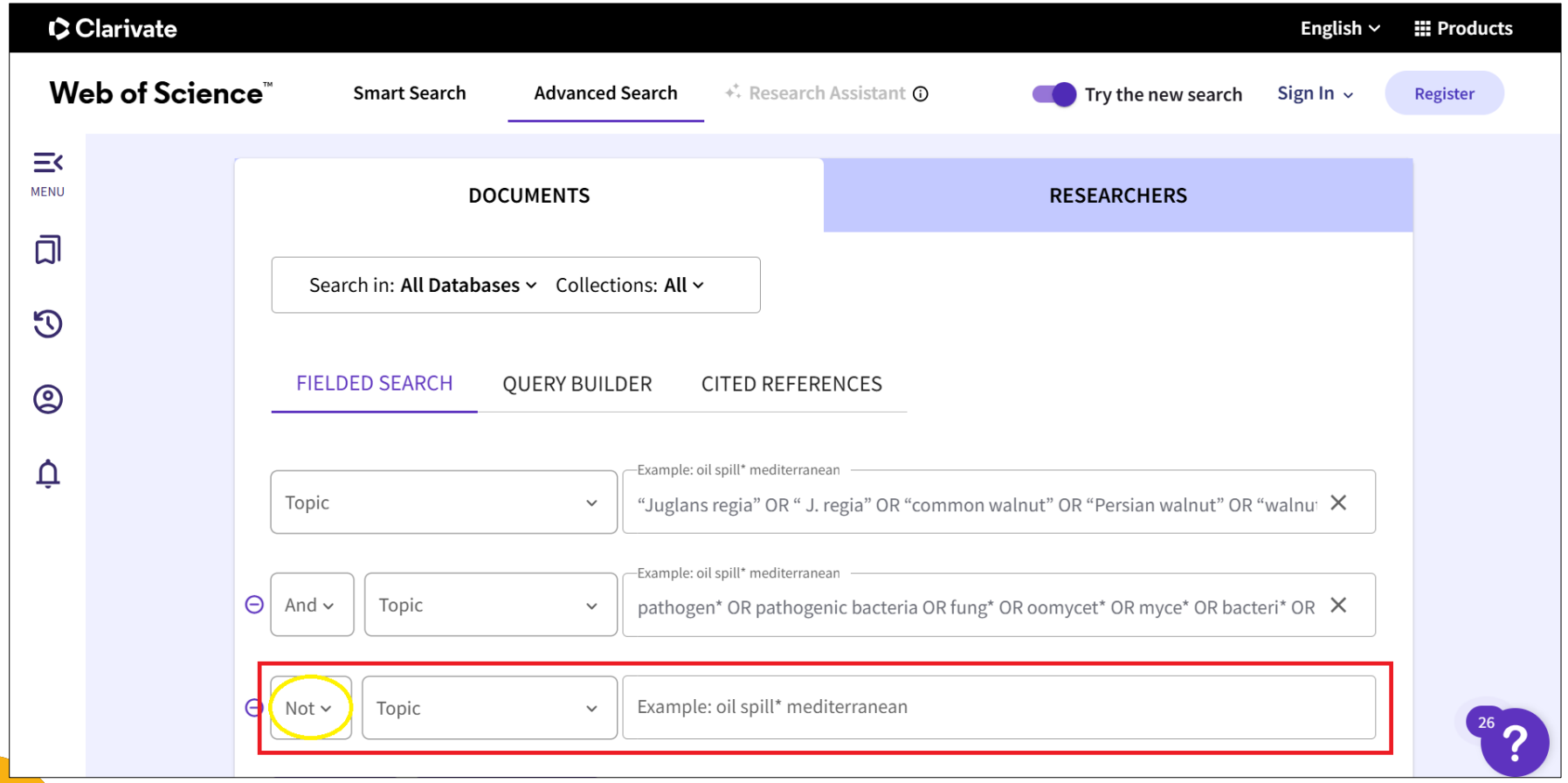


- A new line **highlighted in red** will appear
- Select **AND** (**highlighted in yellow**)
- Into this column (**TOPIC2**) insert a list of useful words to refine the search (see the next slide)
- This point can be considered standard and can be copied from previous search strings

16. WEB OF SCIENCE - TOPIC2 STRING

- pathogen* OR pathogenic bacteria OR fung* OR oomycet* OR myce* OR bacteri* OR virus* OR viroid* OR insect$ OR mite$ OR phytoplasm* OR arthropod* OR nematod* OR disease$ OR infecti* OR damag* OR symptom* OR pest$ OR vector OR hostplant$ OR “host plant$” OR host OR “root lesion$” OR decline$ OR infestation$ OR damage$ OR symptom$ OR dieback* OR “die back*” OR “malaise” OR aphid$ OR curculio OR thrip$ OR cicad$ OR miner$ OR borer$ OR weevil$ OR “plant bug$” OR spittlebug$ OR moth$ OR mealybug$ OR cutworm$ OR pillbug$ OR “root feeder$” OR caterpillar$ OR “foliar feeder$” OR virosis OR viroses OR blight$ OR wilt$ OR wilted OR canker OR scab$ OR rot OR rots OR rotten OR “damping off” OR “damping-off” OR blister$ OR “smut” OR mould OR mold OR “damping syndrome$” OR mildew OR scald$ OR “root knot” OR “root-knot” OR rootknot OR cyst$ OR “dagger” OR “plant parasitic” OR “parasitic plant” OR “plant$parasitic” OR “root feeding” OR “root$feeding”

16. WEB OF SCIENCE

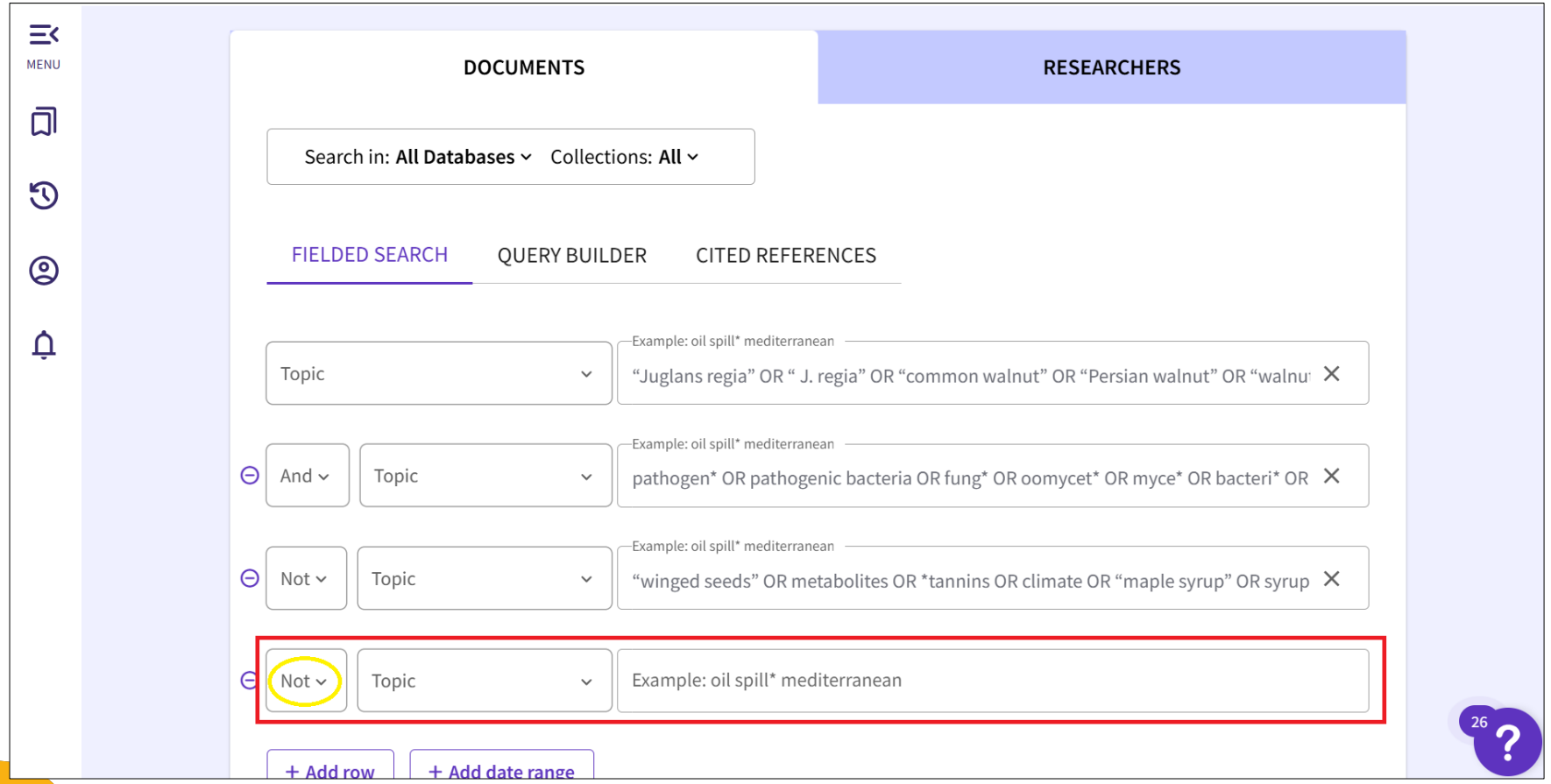


- Add a new row
- Select **Not** (**highlighted in yellow**)
- Into this column (**TOPIC3**) insert list of words that can be excluded
- *Example: after a first screening of the papers retrieved for Acer sp. we found out that aCER is also a technic used in psychology. Therefore, this acronym with its definition can be listed between the words to be excluded.*
- see the next slide for words excluded from the search

16. WEB OF SCIENCE – TOPIC3 STRING

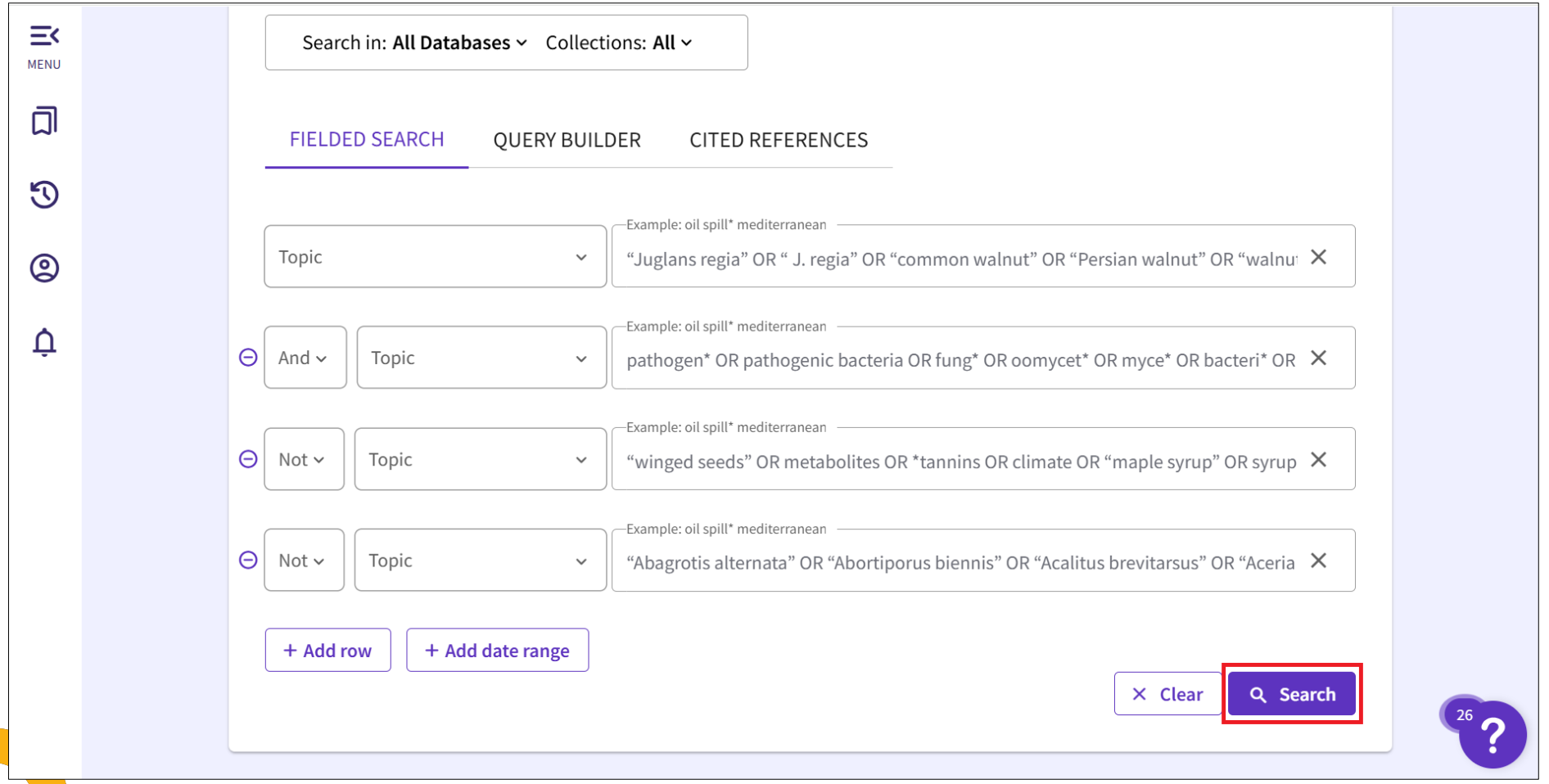
- “winged seeds” OR metabolites OR *tannins OR climate OR “maple syrup” OR syrup OR mycorrhiz* OR “carbon loss” OR pollut* OR weather OR propert* OR probes OR spectr* OR antioxidant$ OR transformation OR RNA OR DNA OR “Secondary plant metabolite$” OR metabol* OR “Phenolic compounds” OR Quality OR Abiotic OR Storage OR Pollen* OR fertil* OR Mulching OR Nutrient* OR Pruning OR drought OR “human virus” OR “animal disease*” OR “plant extracts” OR immunological OR “purified fraction” OR “traditional medicine” OR medicine OR mammal* OR bird* OR “human disease*” OR biomarker$ OR “health education” OR bat$ OR “seedling$ survival” OR “anthropogenic disturbance” OR “cold resistance” OR “salt stress” OR salinity OR “aCER method” OR “adaptive cognitive emotion regulation” OR nitrogen OR hygien* OR “cognitive function$” OR fossil$ OR *toxicity OR Miocene OR postglacial OR “weed control” OR landscape

16. WEB OF SCIENCE – TOPIC4



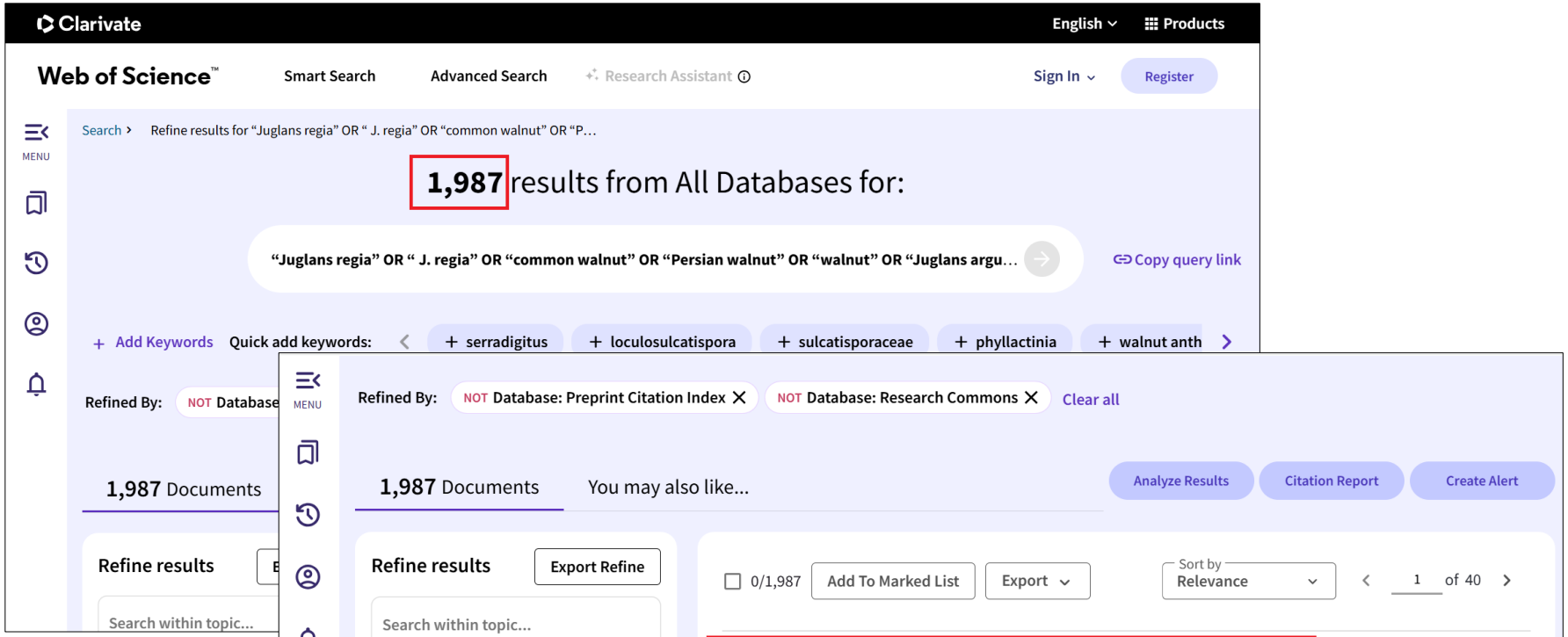
- Add a new row
- Select **Not** (**highlighted in yellow**)
- Into this column (**TOPIC4**) insert list of the pests already retrieved with the search in the different databases that can be excluded.
- In order to do that, the list of pests in the **Mother document** (from other databases) has to be copied in a **new temporary Word** and then the **REPLACE FUNCTION** (see the slides for Useful tools) should be applied (**Find what**: **^p**; **Replace with**: **" OR "**)

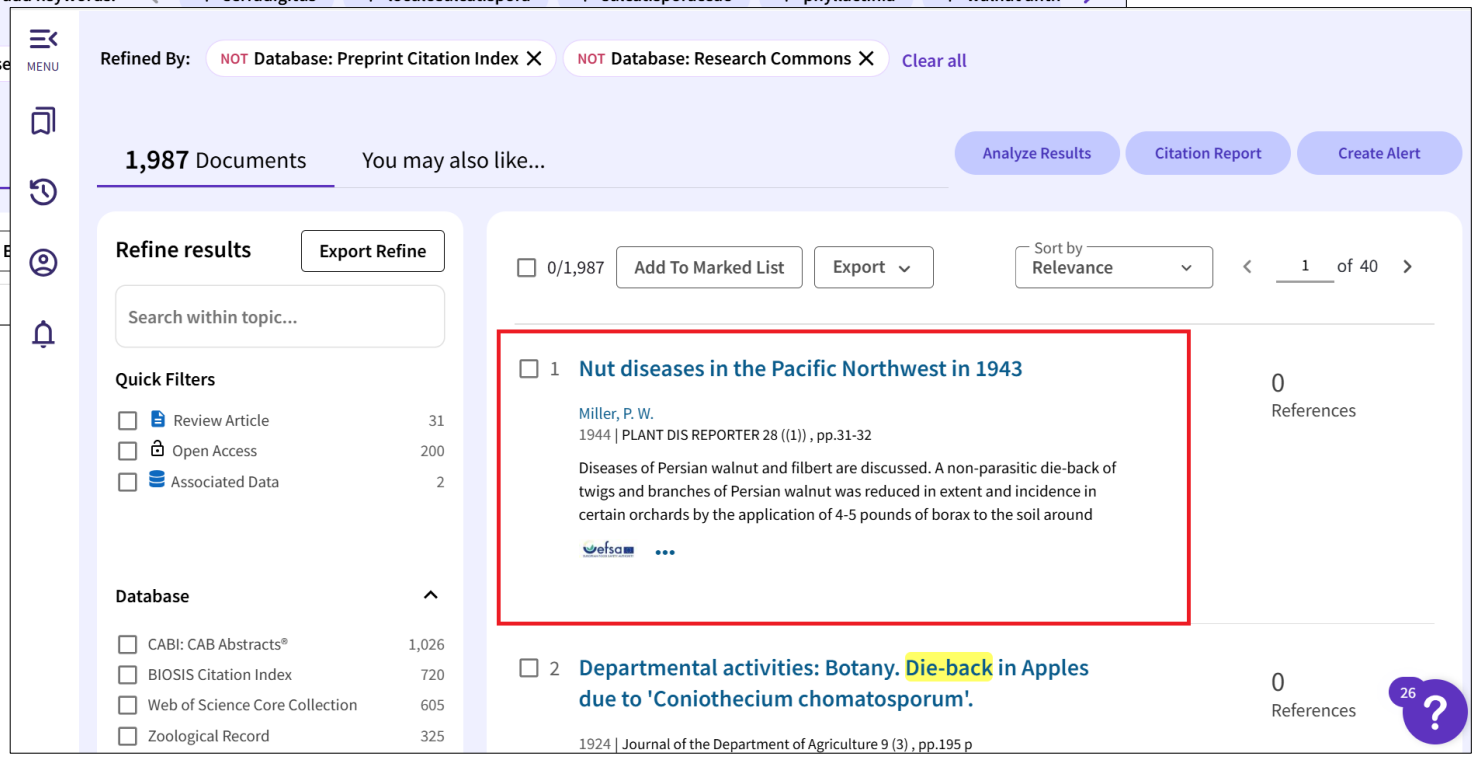
16. WEB OF SCIENCE



- The last line is added
- Click on **Search** (**highlighted in red**)
- **The whole string** has to be recorded in a separate **Word file**, with the **date of access** (see the last slide for **Web of Science**)

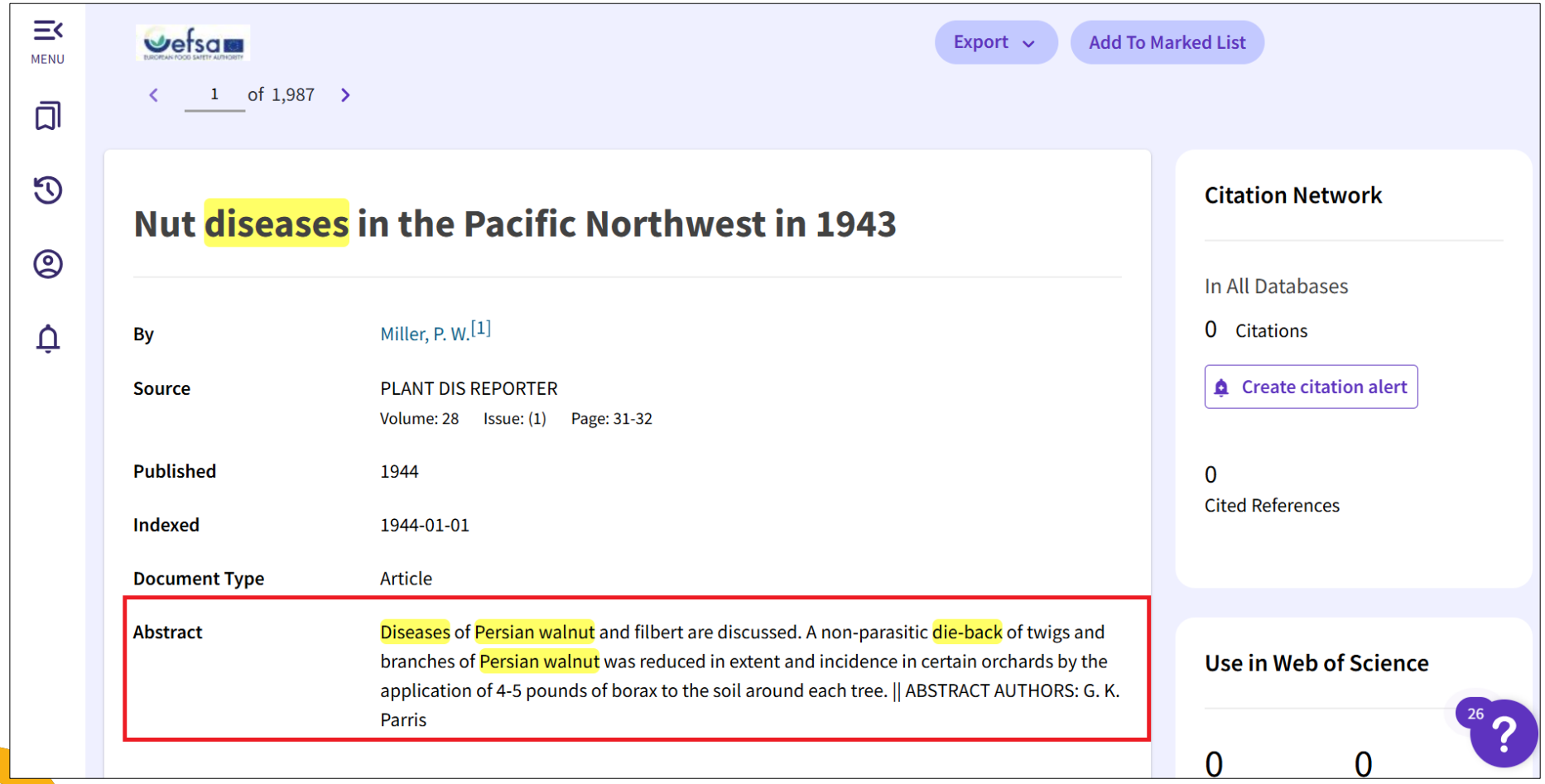
16. WEB OF SCIENCE





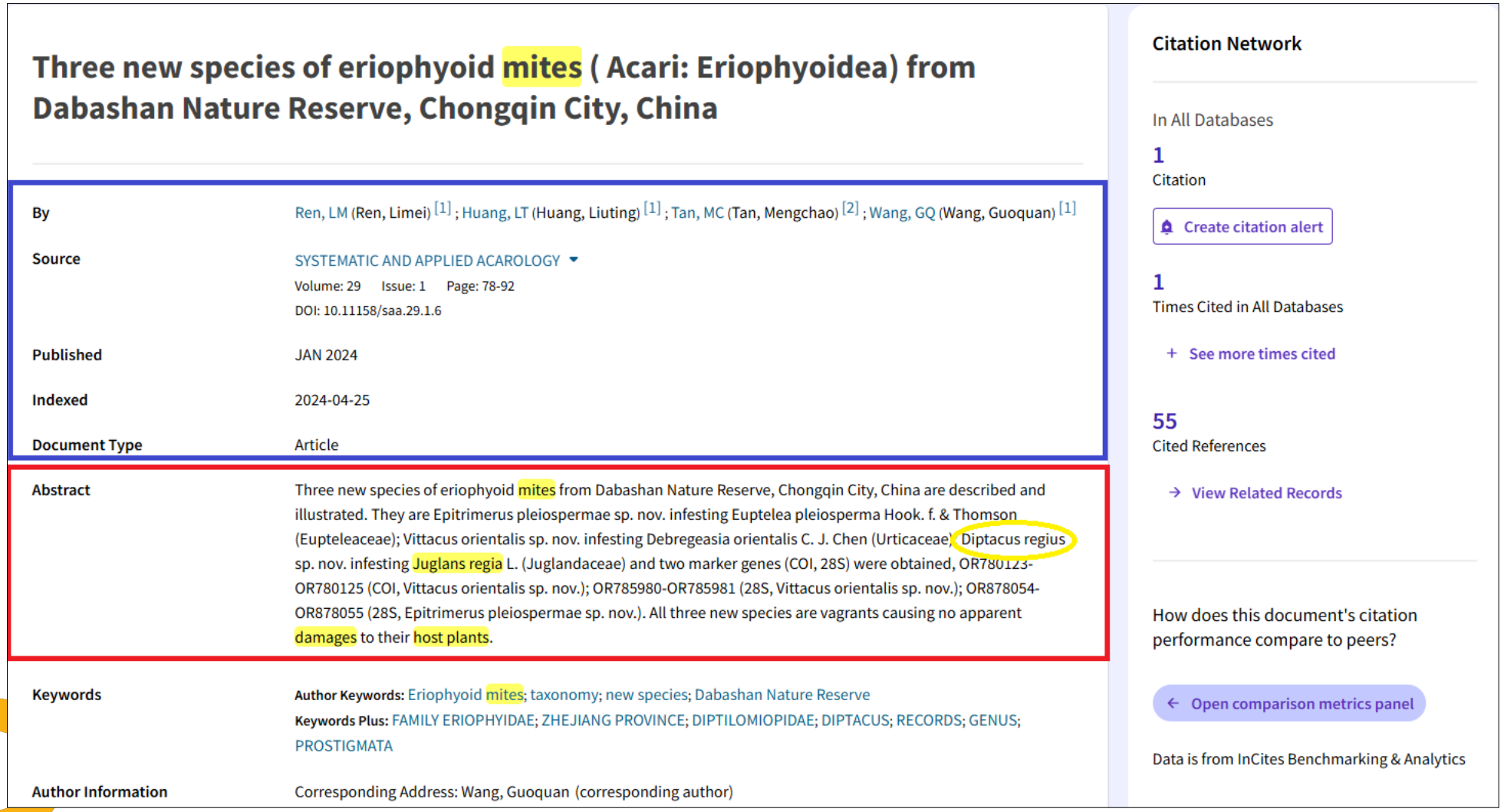
- When the string is done, the papers with the searched content will appear (in *Juglans regia* example, **98 papers** were found)
- Each abstract of the paper needs to be read, in order to find additional pests and pathogens
- If a new pest is found, the pest has to be listed in the **Mother document** and the information about the publication has to be inserted into the specific sheet for **Web of Science**

16. WEB OF SCIENCE



- There are **no additional pests** mentioned in this first abstract
- Therefore, we will not add anything into the **Mother document**

16. WEB OF SCIENCE



Three new species of eriophyoid mites (Acari: Eriophyoidea) from Dabashan Nature Reserve, Chongqin City, China

By	Ren, LM (Ren, Limei) [1] ; Huang, LT (Huang, Liuting) [1] ; Tan, MC (Tan, Mengchao) [2] ; Wang, GQ (Wang, Guoquan) [1]
Source	SYSTEMATIC AND APPLIED ACAROLOGY Volume: 29 Issue: 1 Page: 78-92 DOI: 10.11158/saa.29.1.6
Published	JAN 2024
Indexed	2024-04-25
Document Type	Article
Abstract	Three new species of eriophyoid mites from Dabashan Nature Reserve, Chongqin City, China are described and illustrated. They are Epitrimerus pleiospermae sp. nov. infesting Euptelea pleiosperma Hook. f. & Thomson (Eupteleaceae); Vittacus orientalis sp. nov. infesting Debregeasia orientalis C. J. Chen (Urticaceae); Diptacus regius sp. nov. infesting Juglans regia L. (Juglandaceae) and two marker genes (COI, 28S) were obtained, OR780123-OR780125 (COI, Vittacus orientalis sp. nov.); OR785980-OR785981 (28S, Vittacus orientalis sp. nov.); OR878054-OR878055 (28S, Epitrimerus pleiospermae sp. nov.). All three new species are vagrants causing no apparent damages to their host plants.
Keywords	**Author Keywords:** Eriophyoid mites; taxonomy; new species; Dabashan Nature Reserve **Keywords Plus:** FAMILY ERIOPHYIDAE; ZHEJIANG PROVINCE; DIPTILOMIOPIDAE; DIPTACUS; RECORDS; GENUS; PROSTIGMATA
Author Information	Corresponding Address: Wang, Guoquan (corresponding author)

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55
Cited References

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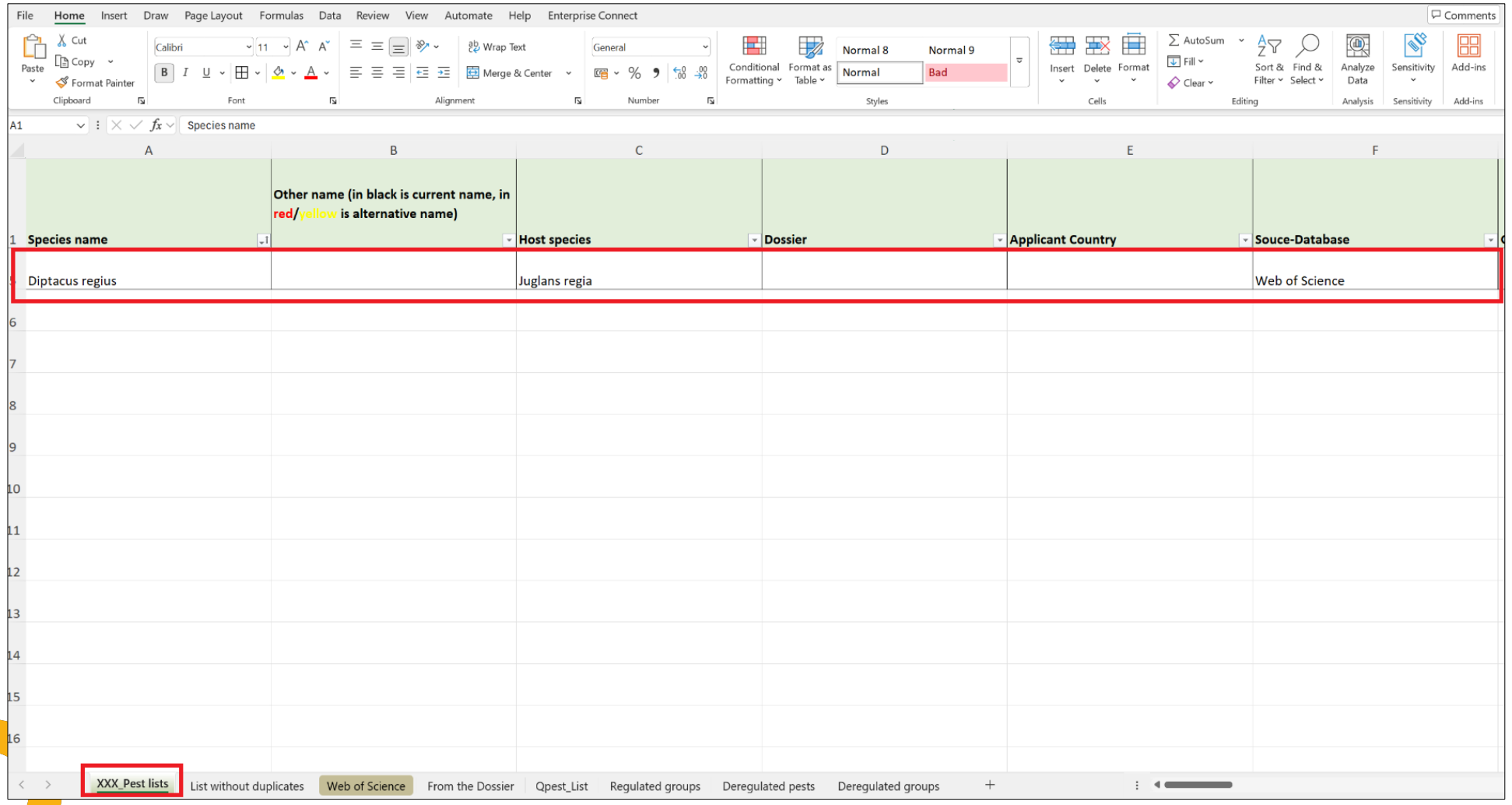
← Open comparison metrics panel

Data is from InCites Benchmarking & Analytics

- In the second abstract there is **one pest** mentioned (**highlighted in yellow**)
- Therefore, we will add it and the information on the publication to the pest list in the **Mother document** (see the next slide)

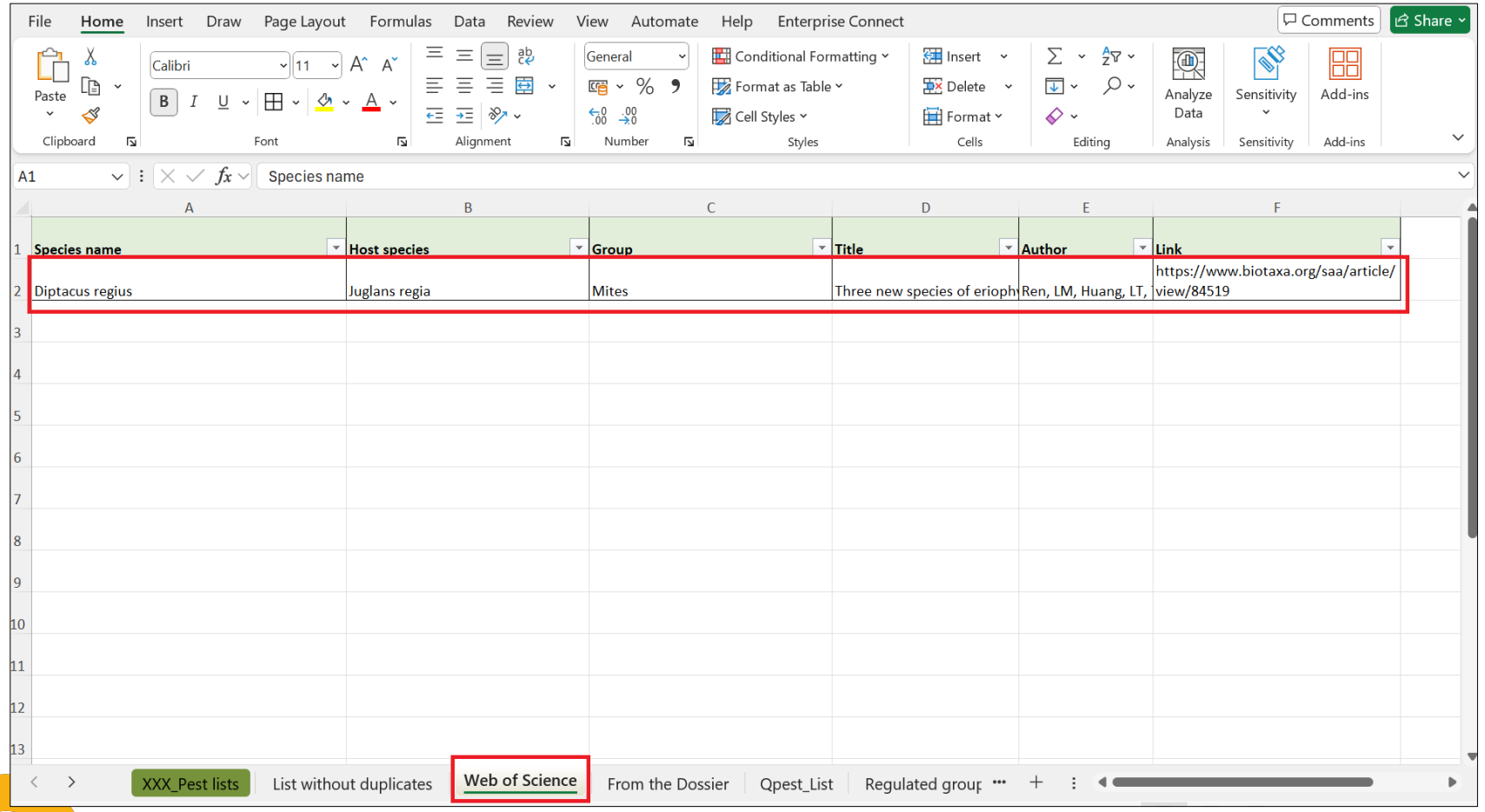
16. WEB OF SCIENCE



	A	B	C	D	E	F
1	**Species name**	**Other name (in black is current name, in red/yellow is alternative name)**	**Host species**	**Dossier**	**Applicant Country**	**Souce-Database**
5	Diptacus regius		Juglans regia			Web of Science

- Insert the pest into the **Mother document** (XXX_Pest lists) indicating the source database as **Web of Science**

16. WEB OF SCIENCE



- In the sheet called **Web of Science** insert all the information about the publication
  - Pest name/names
  - Host species
  - Group
  - Title of the publication
  - Author/Authors and year
  - Direct original link to the publication (other than Web of Science, because this will redirect us to the general WoS page, not to the paper itself)
- This step is done, in order to find the publication easily (if it was needed by experts)

16. WEB OF SCIENCE

Appendix B – Web of Science All Databases Search String

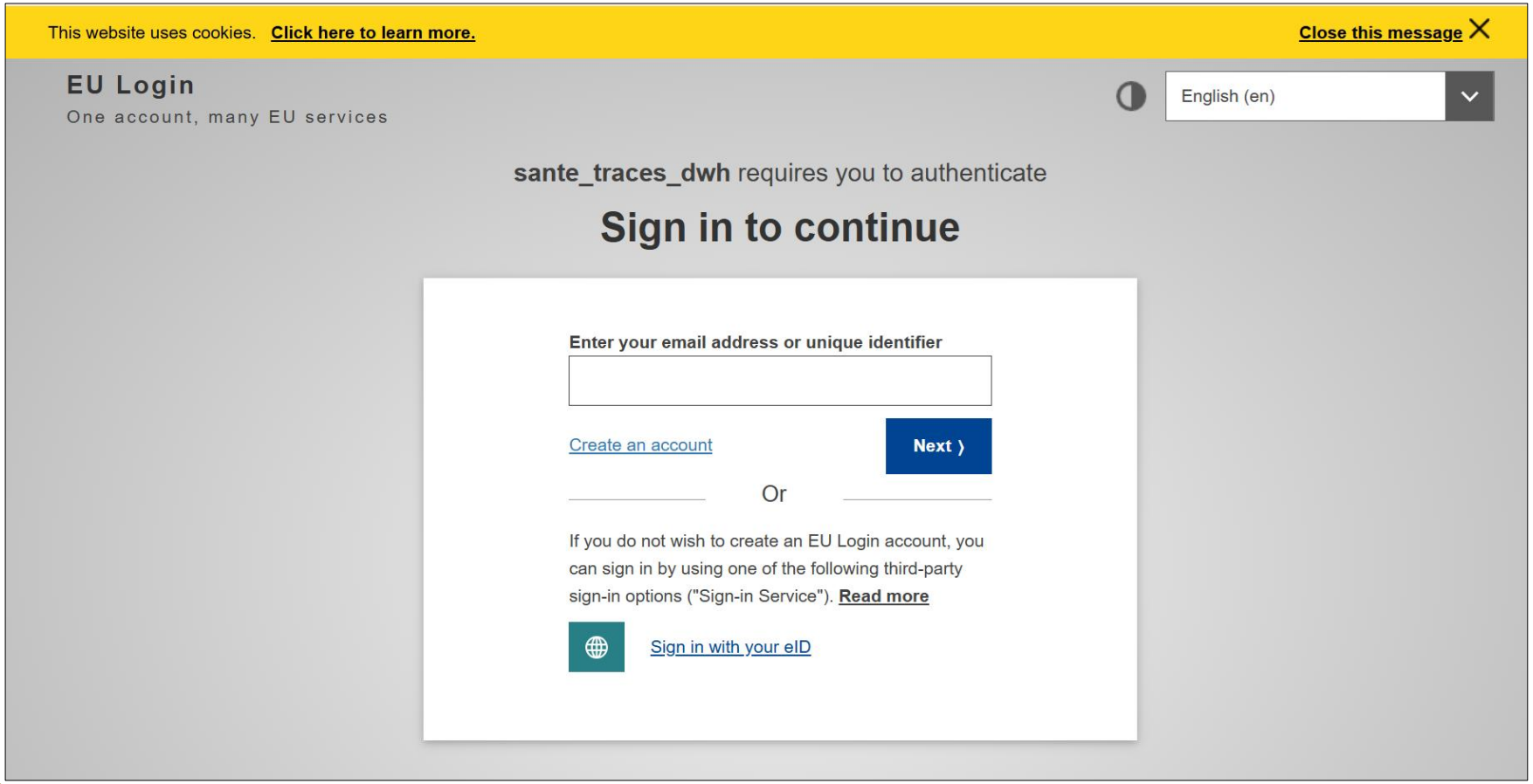
In the table B.1, the search string for *Juglans regia* used in Web of Science is reported. Totally, 1987 papers were retrieved. Titles and abstracts were screened on 26 September 2025 and 179 pests were added to the list of pests (see Appendix E).

Table B.1: String for *Juglans regia*

Web of Science All databases	**TOPIC:** ("Juglans regia" OR "J. regia" OR "common walnut" OR "Persian walnut" OR "walnut" OR "Juglans arguta" OR "Juglans asplenifolia" OR "Juglans dissecta" OR "Juglans duclouxiana" OR "Juglans fallax" OR "Juglans fertilis" OR "Juglans filicifolia" OR "Juglans frutescens" OR "Juglans fruticose" OR "Juglans heterophylla" OR "Juglans kamaonia" OR "Juglans laciniata" OR "Juglans longirostris" OR "Juglans monophyla" OR "Juglans orientis" OR "Juglans pendula" OR "Juglans praematuriens" OR "Juglans quercifolia" OR "Juglans salicifolia" OR "Juglans sinensis") **AND** **TOPIC:** (pathogen* OR pathogenic bacteria OR fung* OR oomycet* OR myce* OR bacteri* OR virus* OR viroid* OR insect$ OR mite$ OR phytoplasm* OR arthropod* OR nematod* OR disease$ OR infecti* OR damag* OR symptom* OR pest$ OR vector OR hostplant$ OR "host plant$" OR host OR "root lesion$" OR decline$ OR infestation$ OR damage$ OR symptom$ OR dieback* OR "die back*" OR "malaise" OR aphid$ OR curculio OR thrip$ OR cicad$ OR miner$ OR borer$ OR weevil$ OR "plant bug$" OR spittlebug$ OR moth$ OR mealybug$ OR cutworm$ OR pillbug$ OR "root feeder$" OR caterpillar$ OR "foliar feeder$" OR virosis OR viroses OR blight$ OR wilt$ OR wilted OR canker OR scab$ OR rot OR rots OR rotten OR "damping off" OR "damping-off" OR blister$ OR "smut" OR mould OR mold OR "damping syndrome$" OR mildew OR scald$ OR "root knot" OR "root-knot" OR rootknot OR cyst$ OR "dagger" OR "plant parasitic" OR "parasitic plant" OR "plant$parasitic" OR "root feeding" OR "root$feeding") **NOT** **TOPIC:** ("winged seeds" OR metabolites OR *tannins OR climate OR "maple syrup" OR syrup OR mycorrhiz* OR "carbon loss" OR pollut* OR weather OR propert* OR probes OR spectr* OR antioxidant$ OR transformation OR RNA OR DNA OR "Secondary plant metabolite$" OR metabol* OR "Phenolic compounds" OR Quality OR Abiotic OR Storage OR Pollen* OR fertil* OR Mulching OR Nutrient* OR Pruning OR drought OR "human virus" OR "animal disease*" OR "plant extracts" OR immunological OR "purified fraction" OR "traditional medicine" OR medicine OR mammal* OR bird* OR "human disease*" OR biomarker$ OR "health education" OR bat$ OR "seedling$ survival" OR

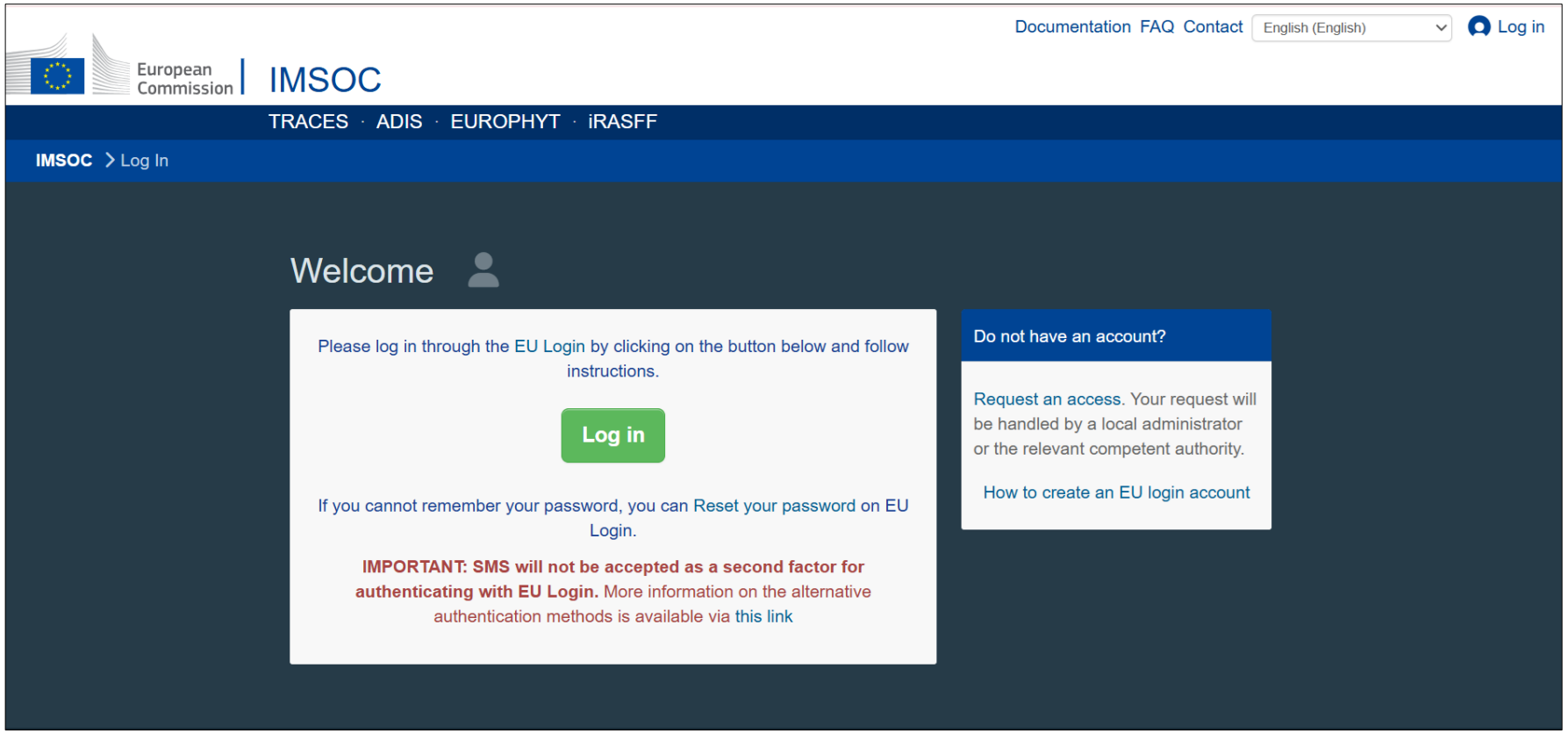
- **The Web of Science String** has to be recorded in a **separate Word document**
  - with the **date range** when the search was done (e.g., 26 September – 10 October 2025)
  - with the **number** of retrieved **papers**
  - with the **number** of newly added **pests**
- All these information will be added into the **Scientific Opinion**

17. EUROPHYT



- In order to use **EUROPHYT (link)**, you need to have an account and access
- Use **EUROPHYT manual** prepared by Ewelina
- Aim of using **EUROPHYT** is to find pests intercepted with the plant species commodity
- If there are some pests found, we need to add them into the **Mother document** (indicating source database as **EUROPHYT**)
- In the separate document we need to store the search string, the date of the search and the results

18. TRACES-NT



- In order to use **TRACES-NT (link)**, you need to have an account and access
- Use **TRACES-NT manual** prepared by Alice
- Aim of using **TRACES-NT** is to find pests intercepted with the plant species commodity
- If there are some pests found, we need to add them into the **Mother document** (indicating source database as **TRACES-NT**)
- In the separate document we need to store the search string, the date of the search and the results