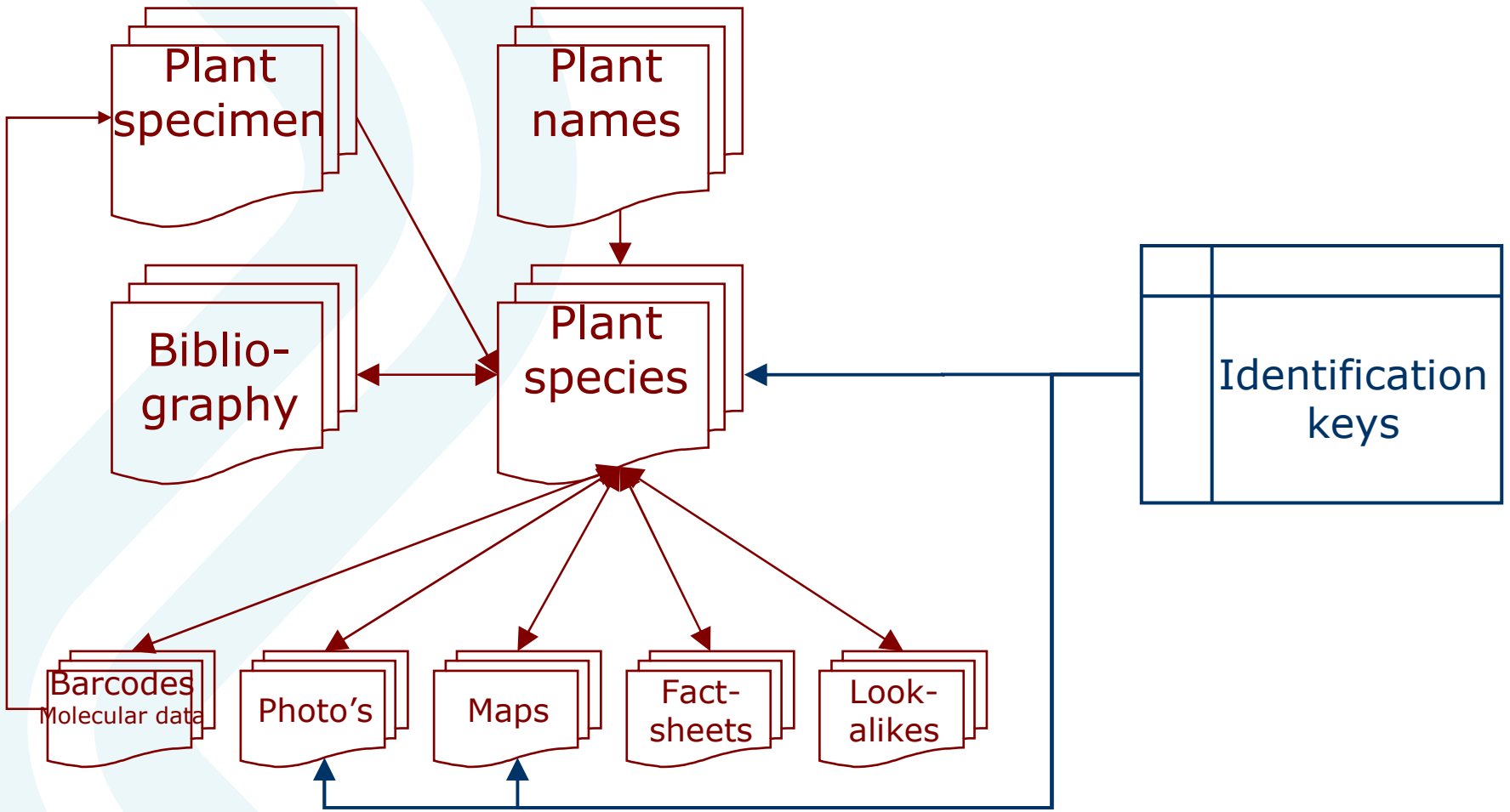
Q-bank: a new online portal for information on identification and biology of INS

Johan van Valkenburg & Edu Boer
NVWA, National Reference Centre

Reducing the Impact of
Non-native Species in Europe
www.rinse-europe.eu

"Investing in your future"
Crossborder cooperation programme 2007-2013 Part-financed by the European Union (European Regional Development Fund)

RINSE


Plant specimen
Plant names
Biblio-graphy
Plant species
Identification keys
Barcodes
Molecular data
Photo's
Maps
Fact-sheets
Look-alikes

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Q-bank Invasive Plants - Mozilla Firefox
Bestand Bewerken Beeld Geschiedenis Bladwijzers Extra Help
Alle verkeer - Google Analytics
Q-bank Invasive Plants
www.q-bank.eu/Plants/
Google
INVASIVE PLANTS
Q-bank
COMPREHENSIVE DATABASES ON QUARANTINE PLANT PESTS AND DISEASES
Home
Organisms included
Methodology
Control
General search
ID
News
Credits
Help
Plants Specimens
Bibliography
Factsheets (in English)
Factsheets (in French)
Factsheets (in Dutch)
Risk Analysis the Netherlands
Q-bank Invasive Plants database
The Invasive Plants database focuses on vascular plan
and mosses), with special attention to aquatic (n
because these plants cause acute and imminent probl
comprising the Netherlands.
The Invasive Plants database facilitates identification of species that
1. Pose a (potential) threat to the biodiversity of the ecozone comprising northern Germany, the Netherlands, Belgium, northwestern France and south-eastern England or
2. Are regulated by third countries and are likely to be present as contaminant in commercial exports originating from the Netherlands.
Data sheets and Pest Risk Analyses as well as relevant EPPO-standards on management for Invasive Plants can be downloaded from www.eppo.org.
Contact:
Dr. Johan van Valkenburg
j.l.c.h.van.valkenburg@minlnv.nl
Curator Invasive Plants database
Phytosanitary expertise
National Reference Centre, Netherlands Food and Consumer Product Safety Authority (NVWA)
the Netherlands

Aims/objectives for RINSE

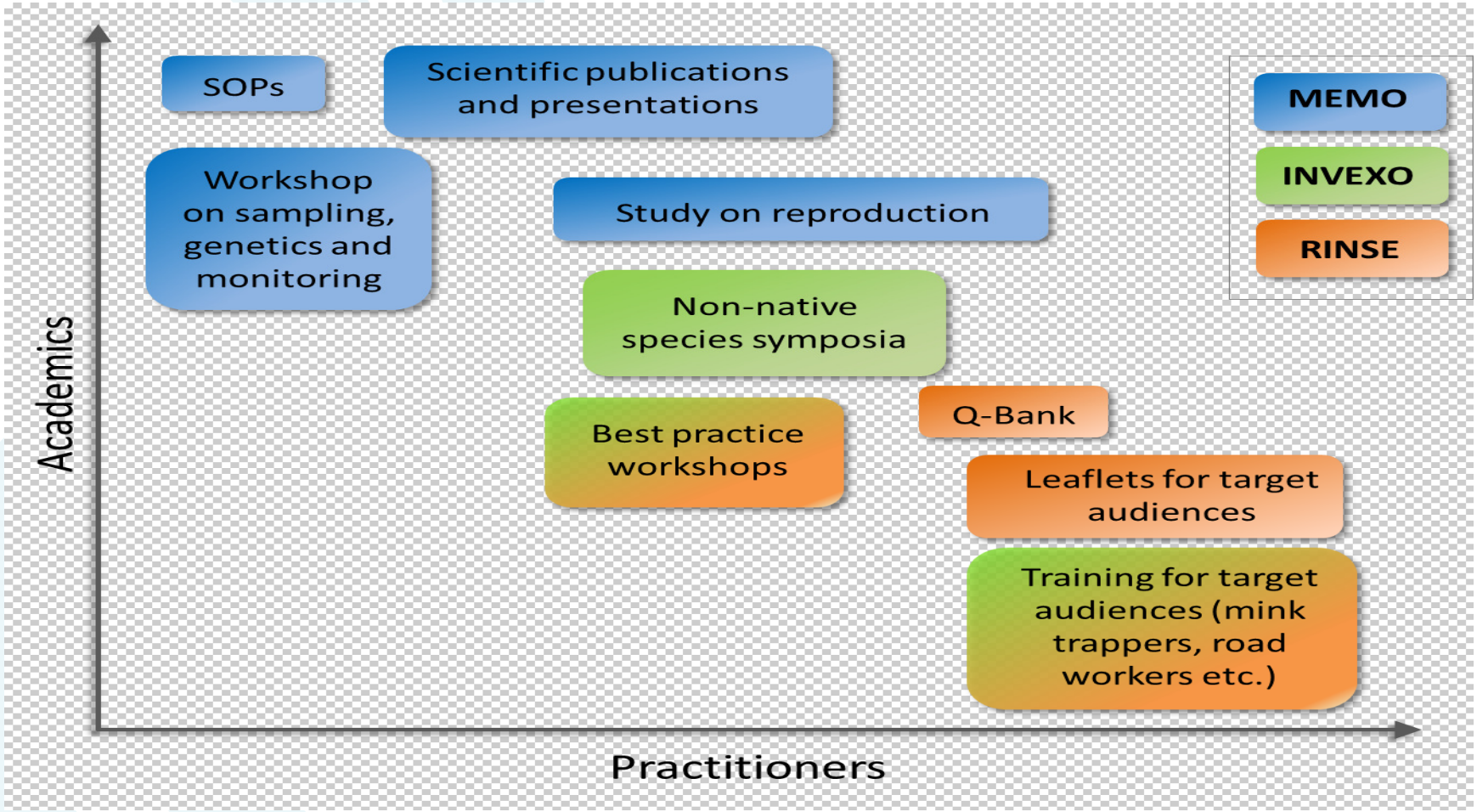
- Translate existing fact sheets in English and French
- Translate existing identification tools in French
- Produce full species records for 5 additional species

  including fact sheets and integration in identification tools in 3 languages

Method/approach adopted

- Translations done with assistance of CPIE (FR) and NCC (UK)
- Distribution maps with the assistance of international contacts in Belgium (National Botanic Garden Meise, INBO), France (CPNB Bailleul) and England (BSBI).
- Incorporation in interactive keys with the assistance of Naturalis Biodiversity Center (NL)
- Selection of species in consultation with regional experts and all project partners

Knowledge transfer



Make people use it!

RINSE

Make it ‘user friendly’

- Go out and meet people in the field
- What do they need
- How do they ‘solve’ identification problems

Always based on accurate information on species identity

A full species record

RINSE

=468&Fields=All

Cabomba caroliniana

Show empty fields

Illustrations

Illustrations :

&Rec=30

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Taxonomy

Family :	Cabombaceae
Genus :	Cabomba
Epitheton :	carolianiana
Author(s) :	A. Gray
Rank :	species
Vernacular names :	Fanwort (UK), waterwaaier (NL), Carolina water-shield
Synonyms :	Cabomba australis Speg.; Cabomba caroliniana Aublet var. caroliniana; Cabomba caroliniana var. pulcherrima. M. Harper; Cabomba pulcherrima (R.M. Harper) Fassett; Cabomba caroliniana var. flavida Ørgaard
EPPO code :	CABCA
Botanical thesaurus :	Cabomba caroliniana
Factsheet link (English) :	Cabomba caroliniana factsheet (English)
Factsheet link (French) :	Cabomba caroliniana factsheet (French)
Factsheet link (Dutch) :	Cabomba caroliniana factsheet (Dutch)

Morphology

Roots and stem

Length of stem (m) :	0.1 - 2 (10)
Description of subterranean parts :	The root systems is attached to the bottom of the water body and it primarily grows in depth up to 3 m.
Description of stem :	Terete or slightly compressed, branched (young stems with white or reddish-brown hairs).

Fruit and seeds

Description of seed :	Seeds ovoid (somewhat globose), tuberculate, with a sclerotesta and by germination opening with an operculum.
Description of fruit :	An indishencent, usually 3-seeded follicle.
Length of fruit (mm) :	4 - 7

Propagules

A fact sheet

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INVASIVE PLANTS

Q-Bank Factsheet

Azolla filiculoides Lam. Fam: Salviniaceae

L'azolla fausse-fougère

Ecologie: Cette plante est capable de rapide prolifération, dominant les eaux stagnantes ou à faible courant, enrichies en éléments minéraux. Elle colonise de préférence les milieux aquatiques plutôt que les sols argileux ou de tourbe et occupe même les eaux saumâtres. Son association symbiotique avec une cyanobactérie (algue bleue) lui permet de fixer l'azote atmosphérique et de s'en nourrir. Au courant de l'hiver les tapis d'Azolla fausse-fougère se décomposent et provoquent une augmentation en concentration d'azote dans l'eau. La plante se dissémine principalement par fragmentation de ses tiges, qui peuvent facilement se propager sur d'autres sites. L'azolla est une plante fugace et imprévisible dans son comportement, une grande population présente dans une année peut disparaître l'année suivante.

Menace: Diminution de l'intensité lumineuse à cause du tapis végétal dense, qui bloque aussi la diffusion de l'oxygen de l'air causant des conditions anaérobiques. Elle peut causer des cas d'obstruction de filtres qui protègent les stations de pompage d'eaux et perturber l'écoulement normal. Elle a aussi une croissance très rapide, la surface peut doubler en 7-10 jours.

Gestion: Gestion mécanique est une solution temporaire. Le charançon *Stenopelmus rufinasus*, s'avère prometteur pour la lutte biologique contre l'azolla et cette espèce est "naturalisée" dans le nord ouest de l'Europe depuis le début du 20ème siècle.

Reconnaissance: Dimensions réduites (jusqu'a 5 cm en diamètre), de couleur vert clair à marron-roux.

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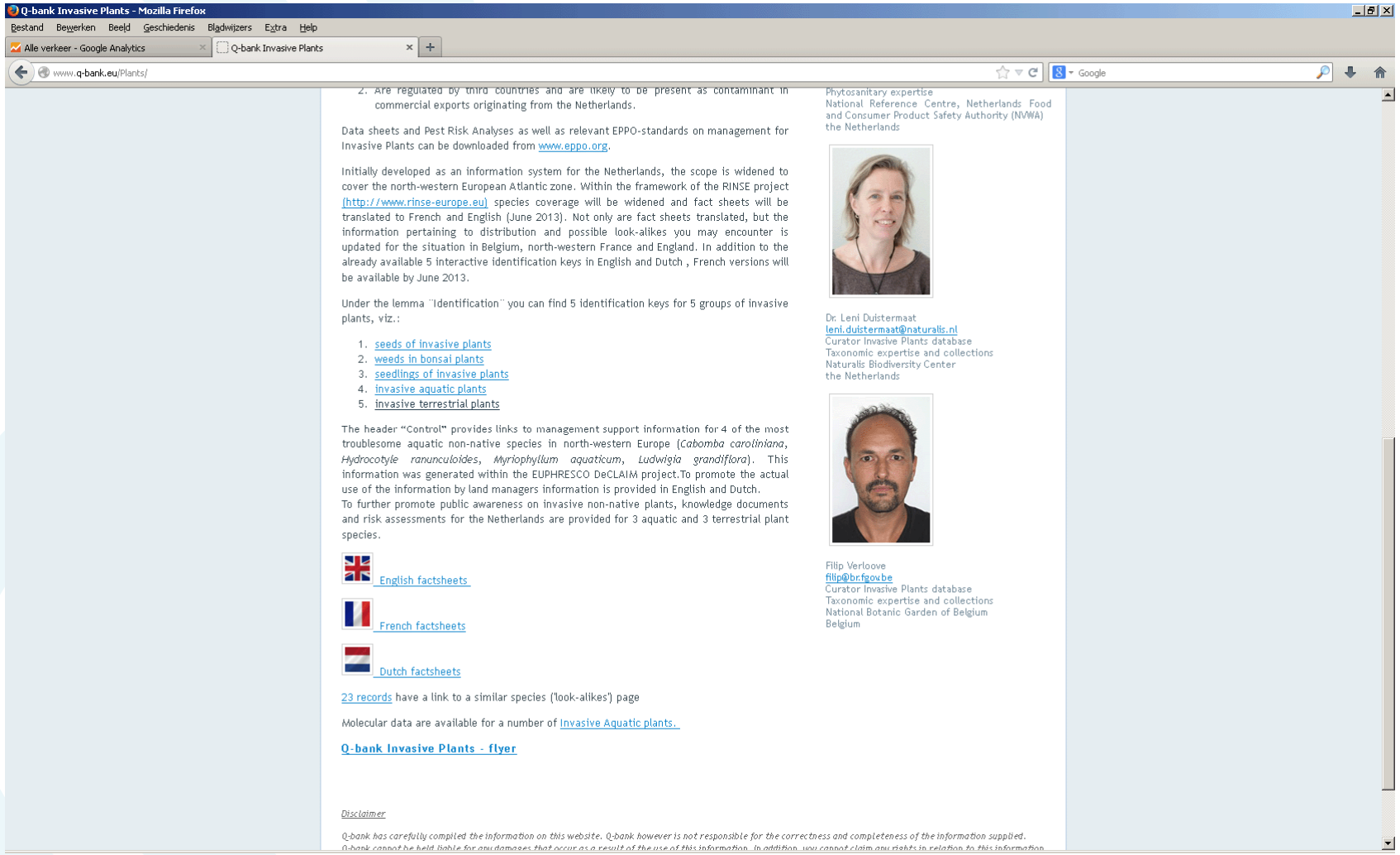
2 Mers Seas Zeeën INTERREG IV A

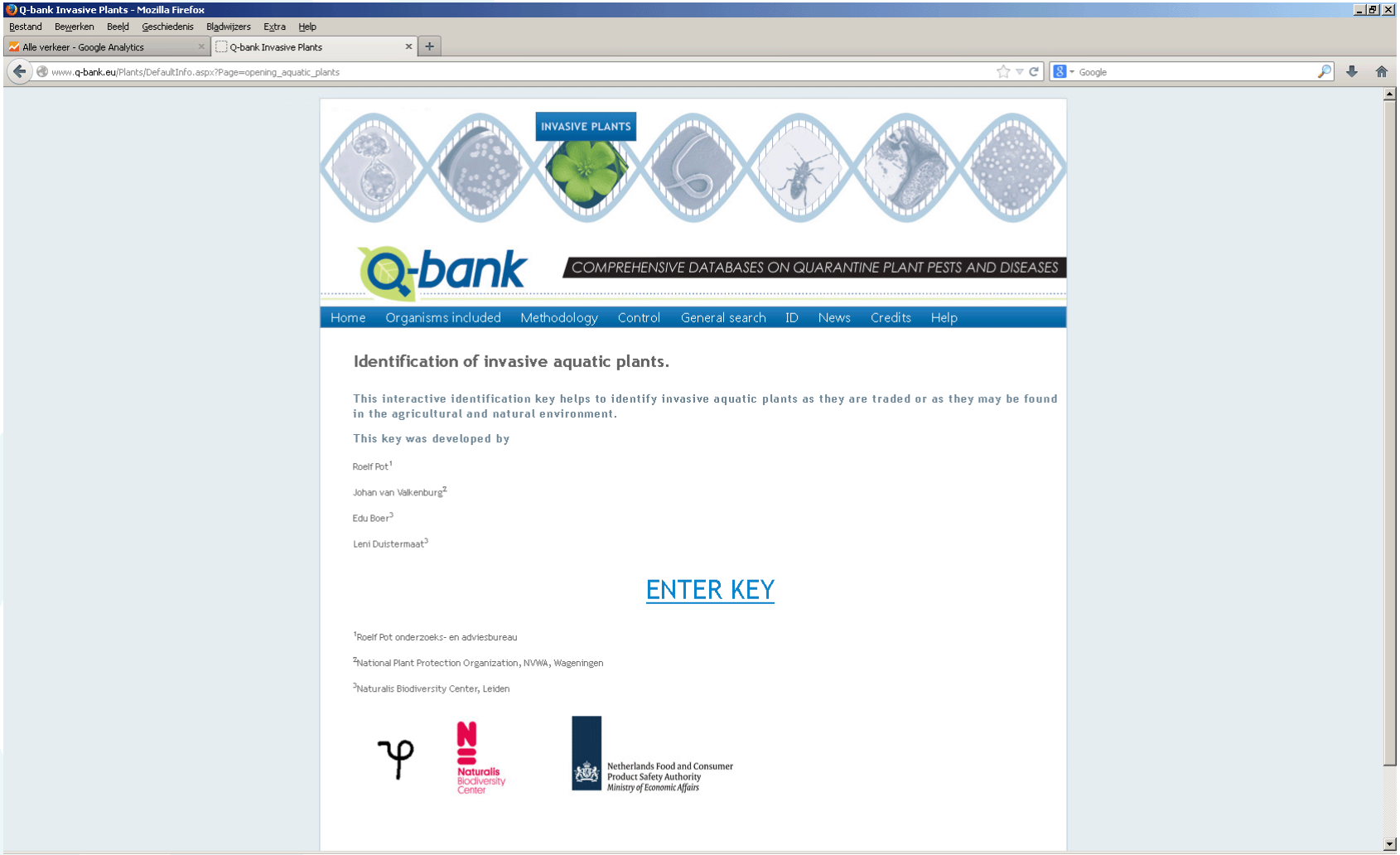
Q-bank

COMPREHENSIVE DATABASES ON REGULATED PLANT PESTS

Opening page with hyperlinks



An identification key



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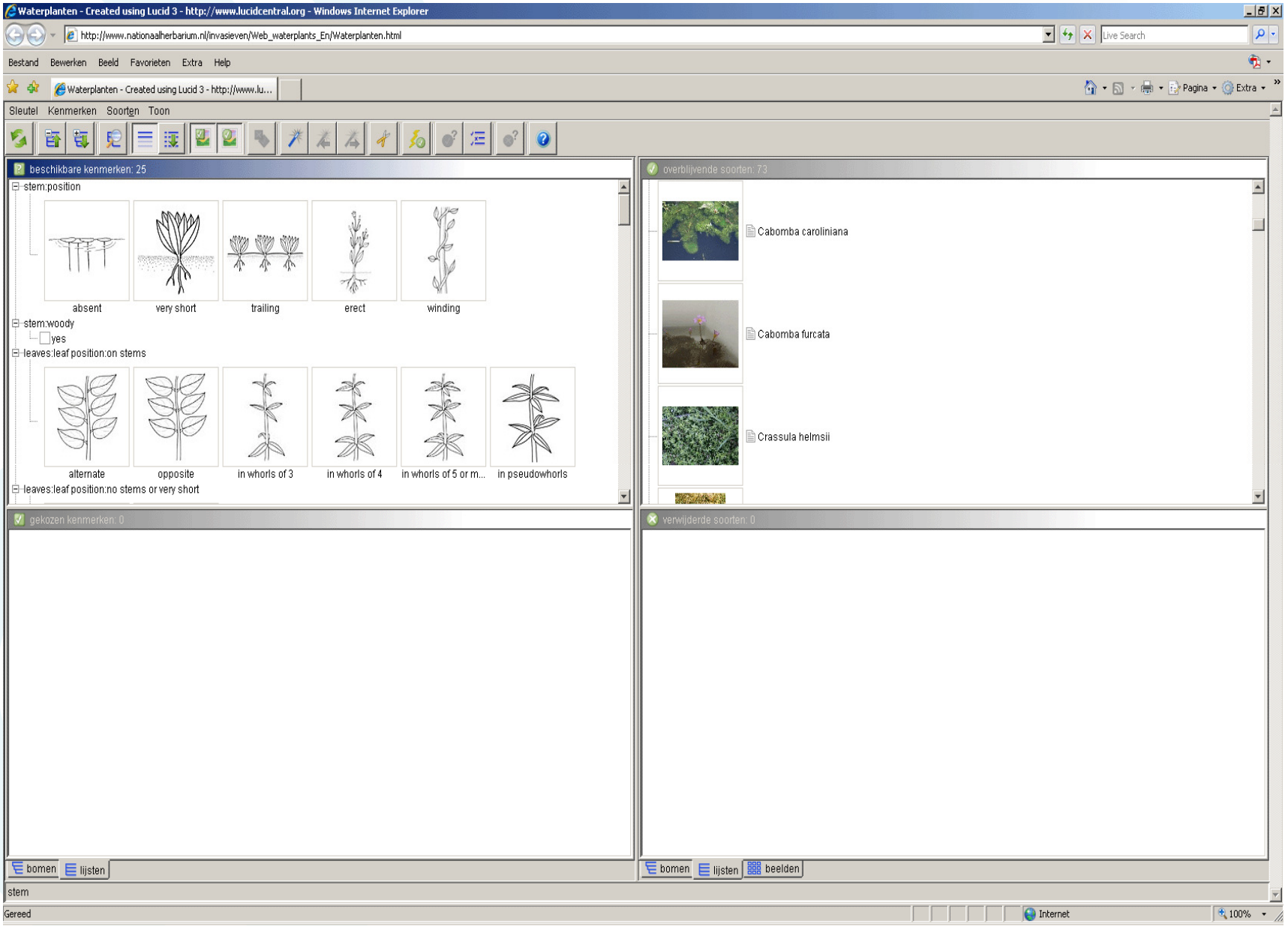
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http://www.nationaalherbarium.nl/invasieven/Web_waterplants_En/Waterplanten.html
Bestand Bewerken Beeld Favorieten Extra Help
Sleutel Kenmerken Soorten Toon
beschikbare kenmerken: 25
stem:position
absent
very short
trailing
erect
winding
stem:woody
yes
leaves:leaf position:on stems
alternate
opposite
in whorls of 3
in whorls of 4
in whorls of 5 or m...
in pseudowhorls
leaves:leaf position:no stems or very short
overblijvende soorten: 73
Cabomba caroliniana
Cabomba furcata
Crassula helmsii
gekozen kenmerken: 0
verwijderde soorten: 0
bomen
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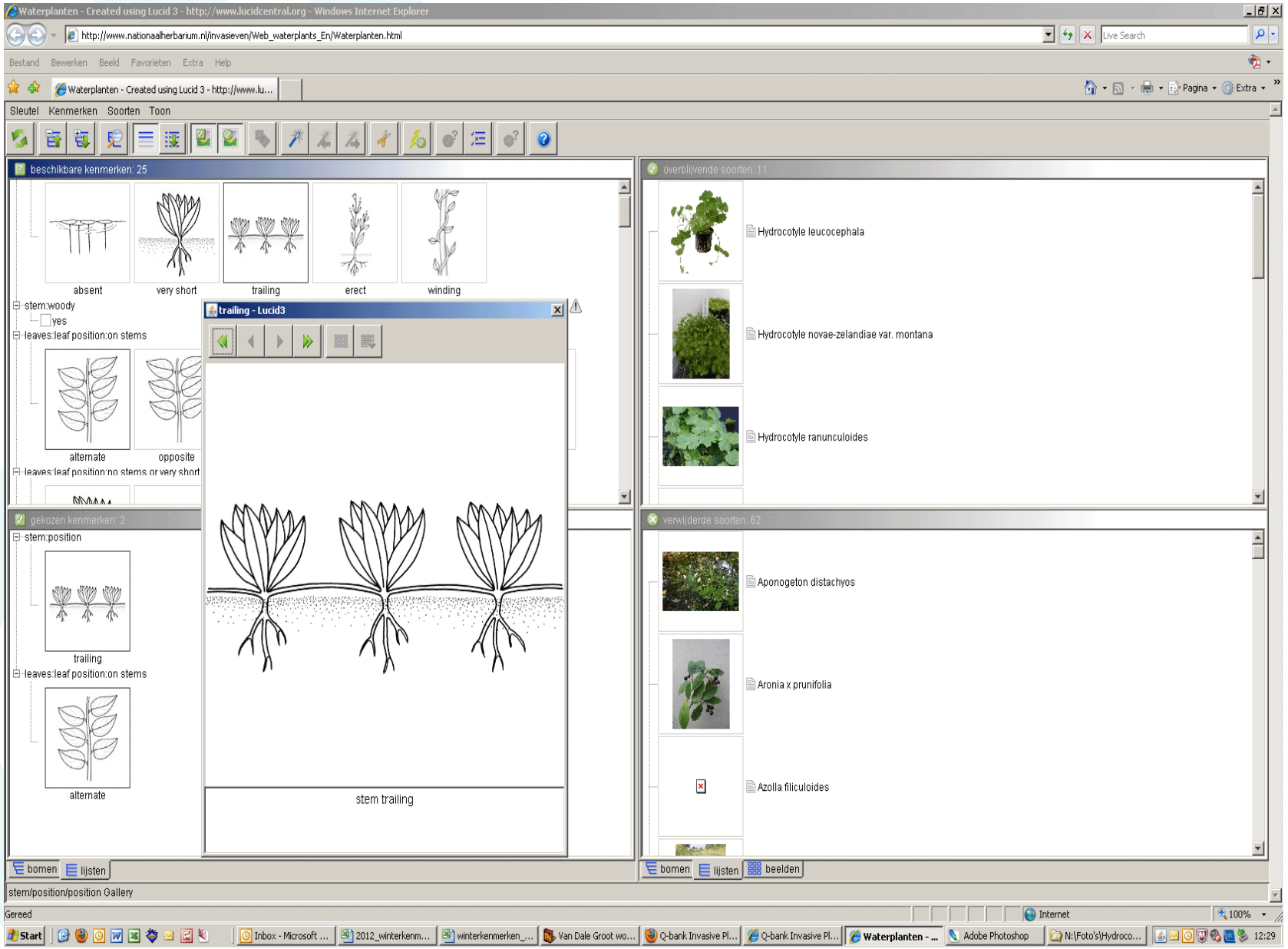
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stem:woody
yes
leaves:leaf position:on stems
alternate
opposite
leaves:leaf position:no stems or very short
trailing - Lucid3
stem trailing
gekozen kenmerken: 2
stem:position
trailing
leaves:leaf position:on stems
alternate
overblijvende soorten: 11
Hydrocotyle leucocephala
Hydrocotyle novae-zelandiae var. montana
Hydrocotyle ranunculoides
verwijderde soorten: 62
Aponogeton distachyos
Aronia x prunifolia
Azolla filiculoides
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beelden
stem/position/position Gallery
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Adobe Photoshop
12:29

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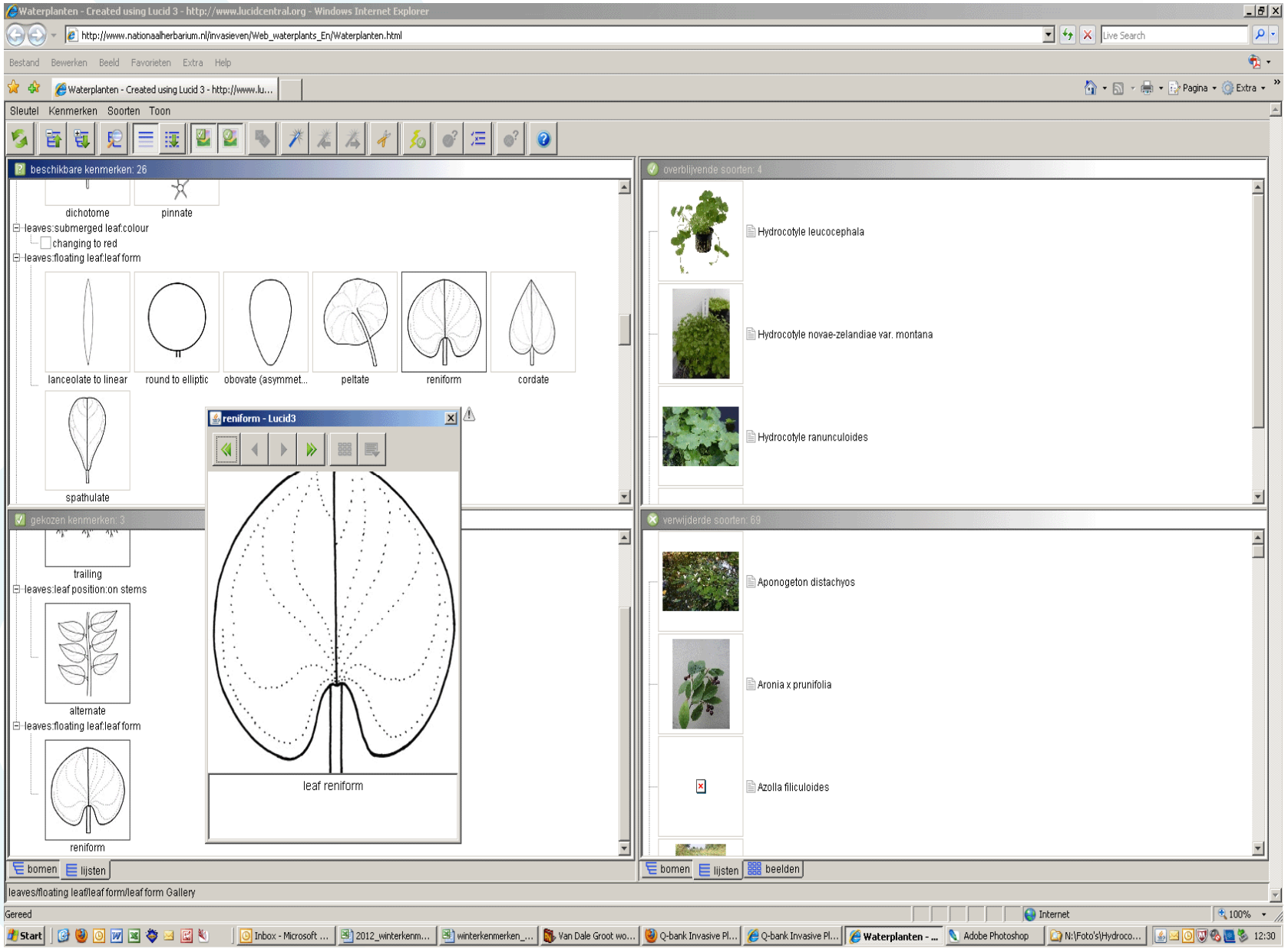
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Sleutel Kenmerken Soorten Toon
beschikbare kenmerken: 26
dichotome
pinnate
leaves:submerged leaf:colour
changing to red
leaves:floating leaf:leaf form
lanceolate to linear
round to elliptic
obovate (asymmet...
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reniform
cordate
spathulate
reniform - Lucid3
leaf reniform
overblijvende soorten: 4
Hydrocotyle leucocephala
Hydrocotyle novae-zelandiae var. montana
Hydrocotyle ranunculoides
gekozen kenmerken: 3
trailing
leaves:leaf position:on stems
alternate
leaves:floating leaf:leaf form
reniform
verwijderde soorten: 69
Aponogeton distachyos
Aronia x prunifolia
Azolla filiculoides
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leaves/floating leaf/leaf form/leaf form Gallery
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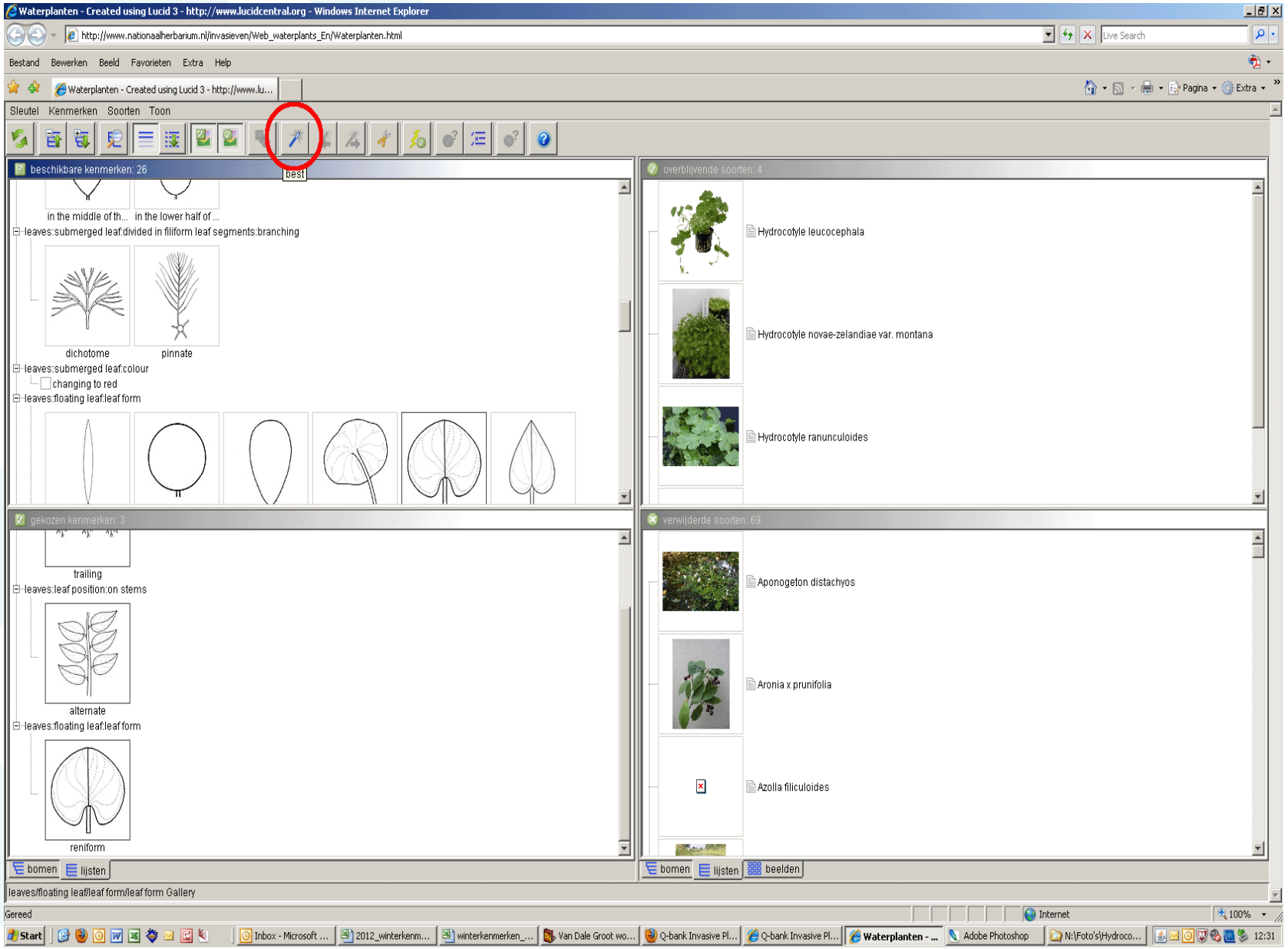
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Bestand Bewerken Beeld Favorieten Extra Help
Sleutel Kenmerken Soorten Toon
best
beschikbare kenmerken: 26
in the middle of th...
in the lower half of ...
leaves:submerged leaf:divided in filiform leaf segments:branching
dichotome
pinnate
leaves:submerged leaf:colour
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Hydrocotyle leucocephala
Hydrocotyle novae-zelandiae var. montana
Hydrocotyle ranunculoides
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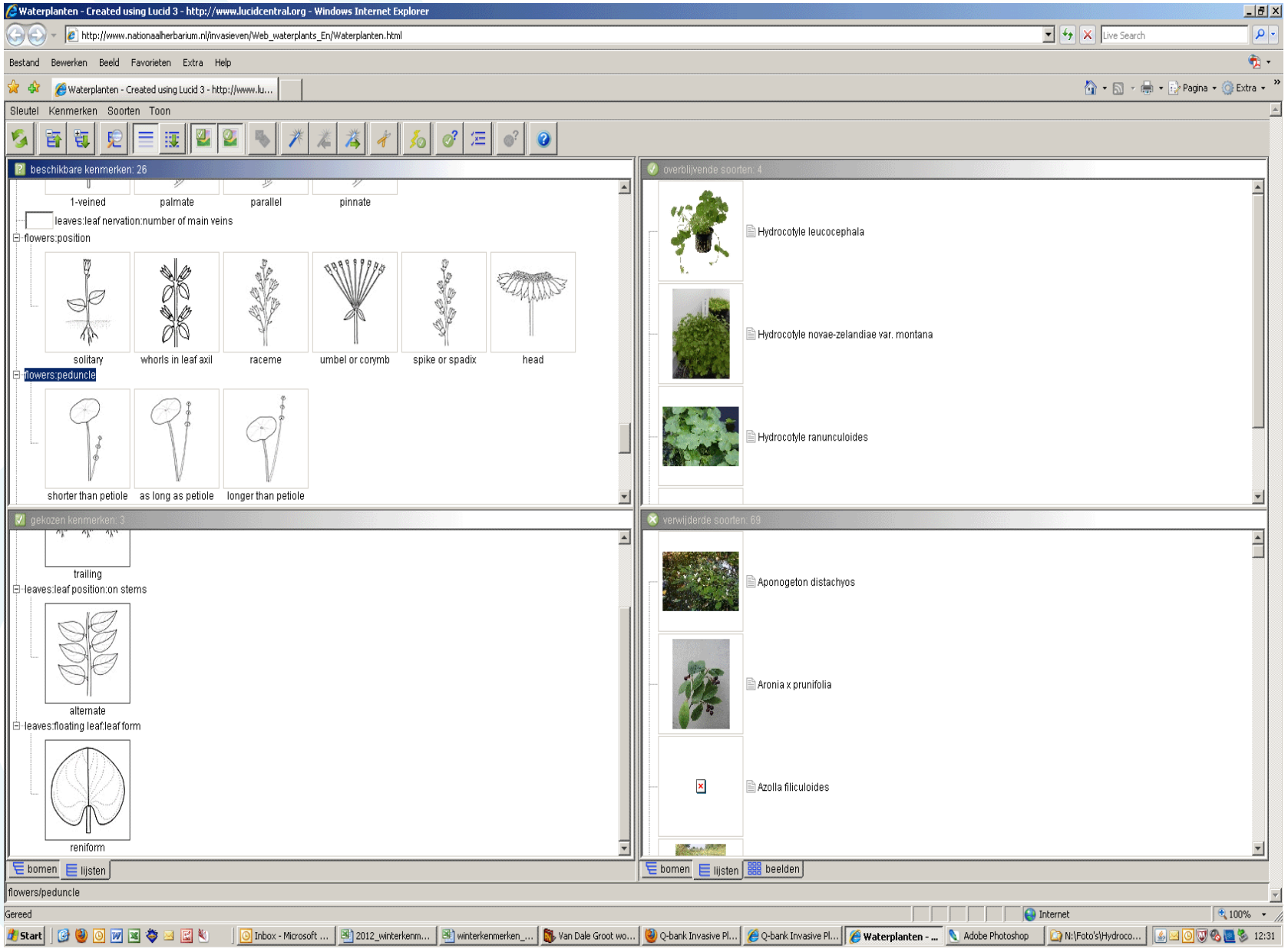
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Bestand Bewerken Beeld Favorieten Extra Help
Sleutel Kenmerken Soorten Toon
beschikbare kenmerken: 26
1-veined
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pinnate
leaves:leaf nervation:number of main veins
flowers:position
solitary
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spike or spadix
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flowers:peduncle
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as long as petiole
longer than petiole
overblijvende soorten: 4
Hydrocotyle leucocephala
Hydrocotyle novae-zelandiae var. montana
Hydrocotyle ranunculoides
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verwijderde soorten: 69
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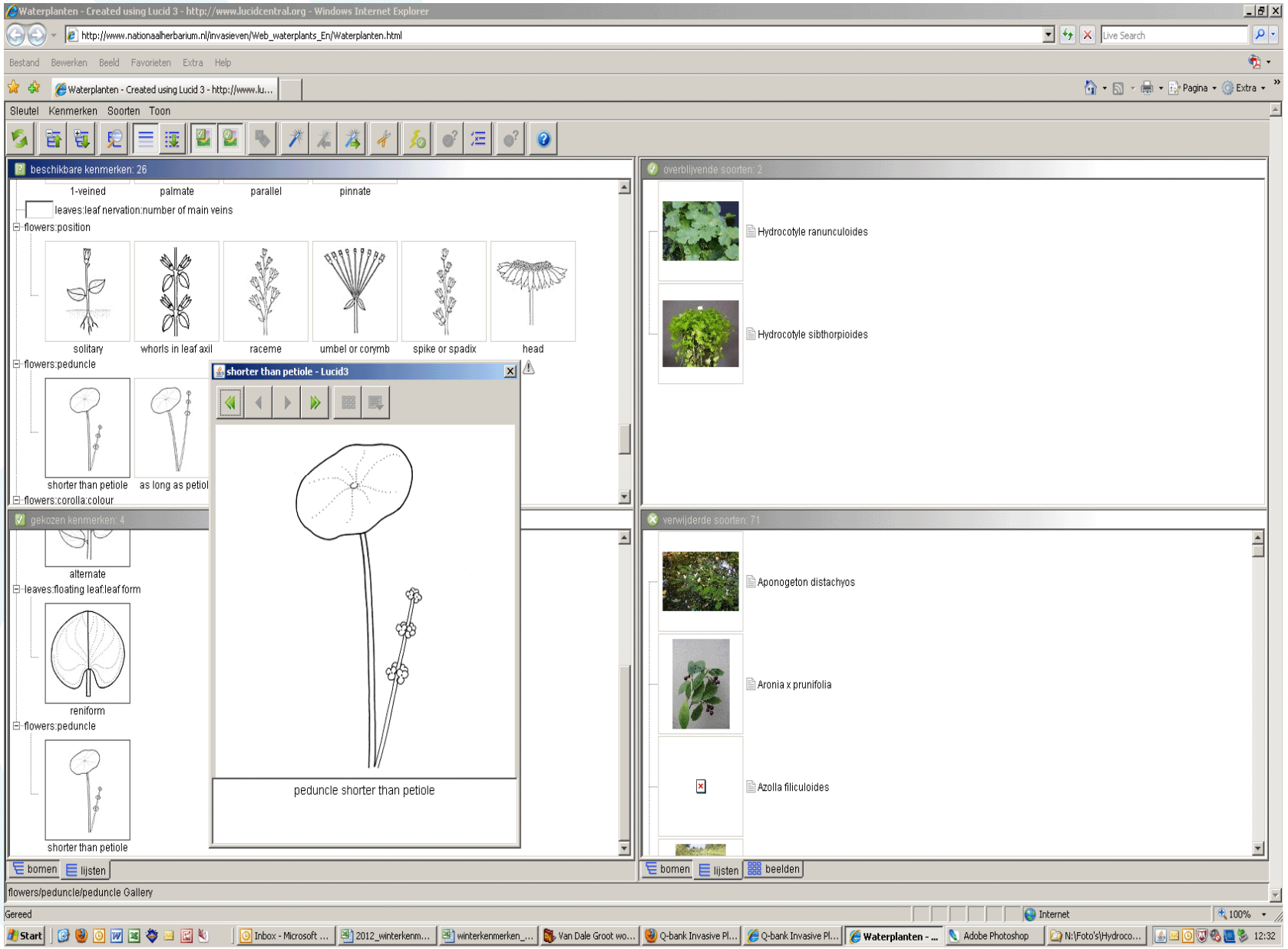
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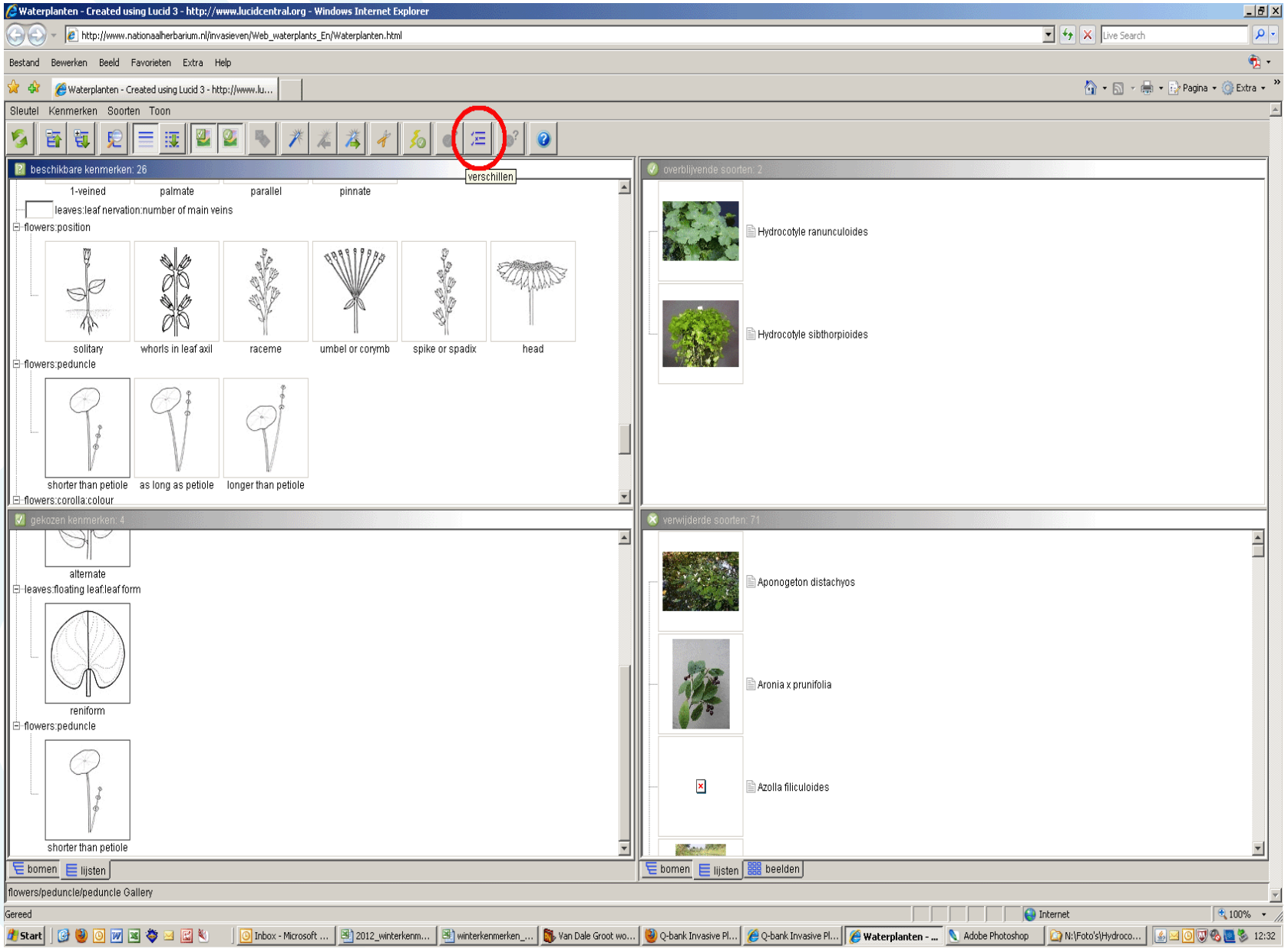
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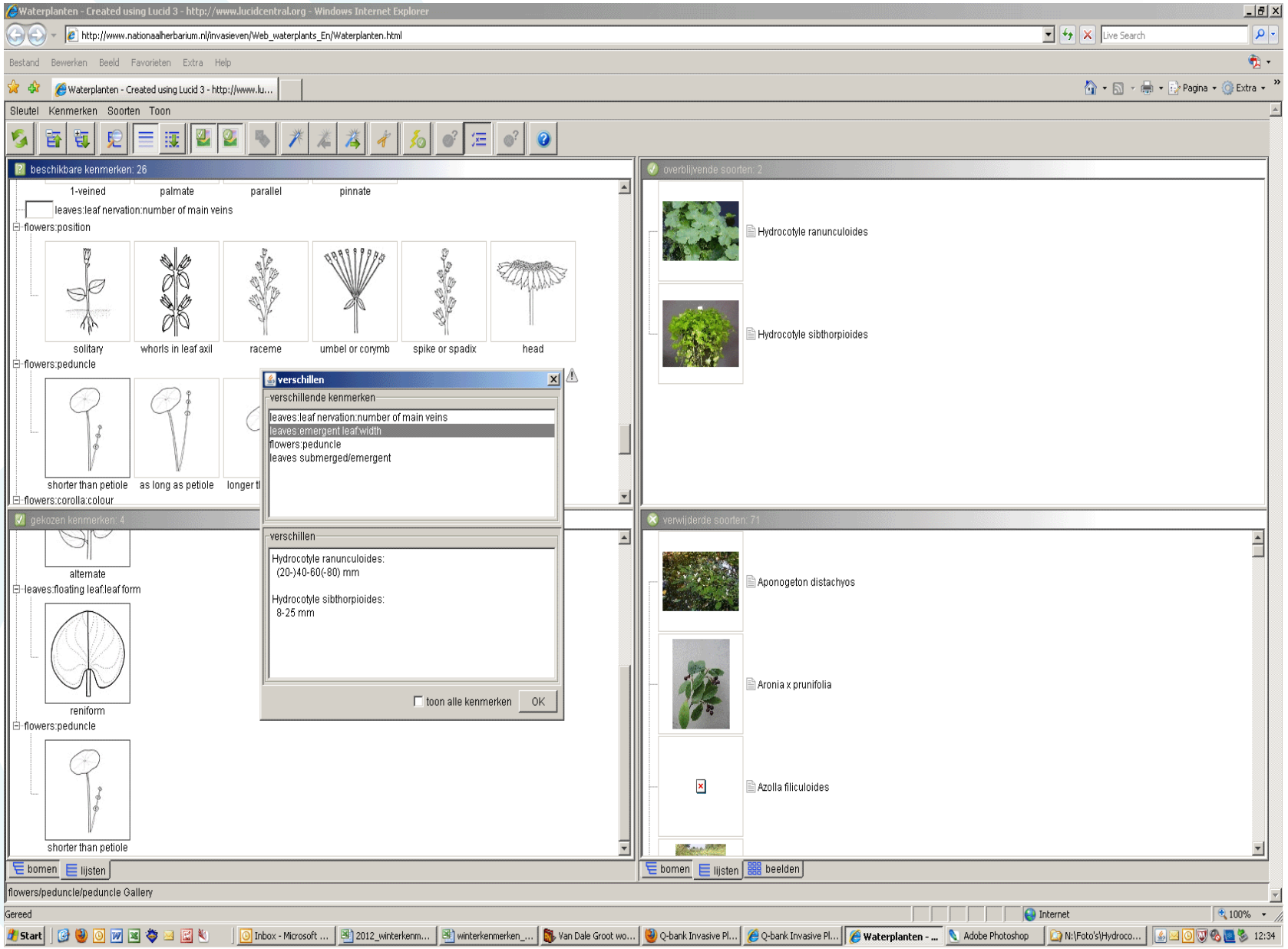
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flowers:corolla:colour
overblijvende soorten: 2
Hydrocotyle ranunculoides
Hydrocotyle sibthorpioides
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verschillende kenmerken
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leaves:emergent leaf:width
flowers:peduncle
leaves submerged/emergent
verschillen
Hydrocotyle ranunculoides:
(20-)40-60(-80) mm
Hydrocotyle sibthorpioides:
8-25 mm
toon alle kenmerken
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gekozen kenmerken: 4
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leaves:floating leaf:leaf form
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flowers:peduncle
shorter than petiole
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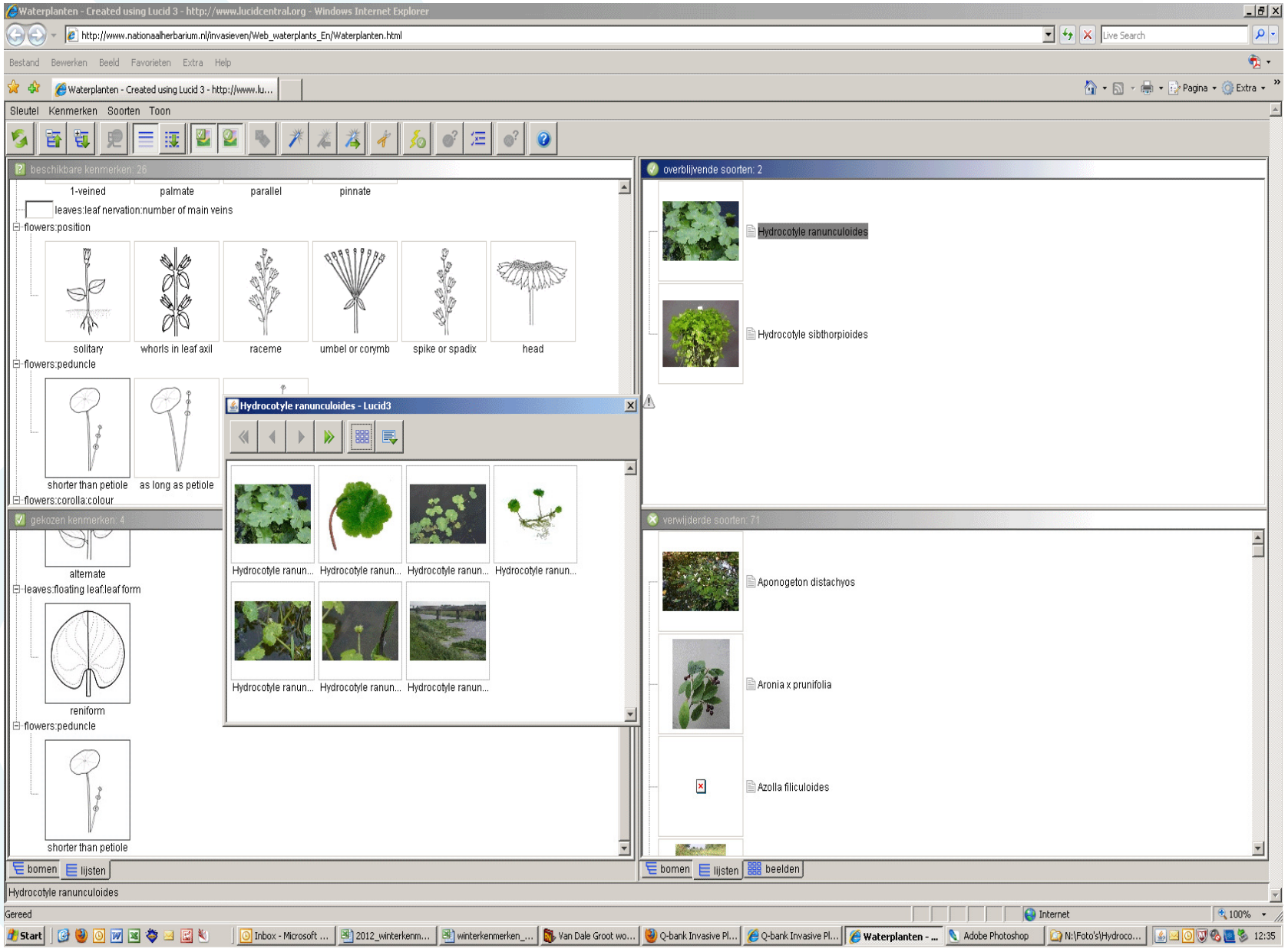
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flowers:peduncle
shorter than petiole
Hydrocotyle ranunculoides - Lucid3
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Hydrocotyle ranunculoides
Hydrocotyle sibthorpioides
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Aronia x prunifolia
Azolla filiculoides
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Hydrocotyle ranunculoides
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Adobe Photoshop
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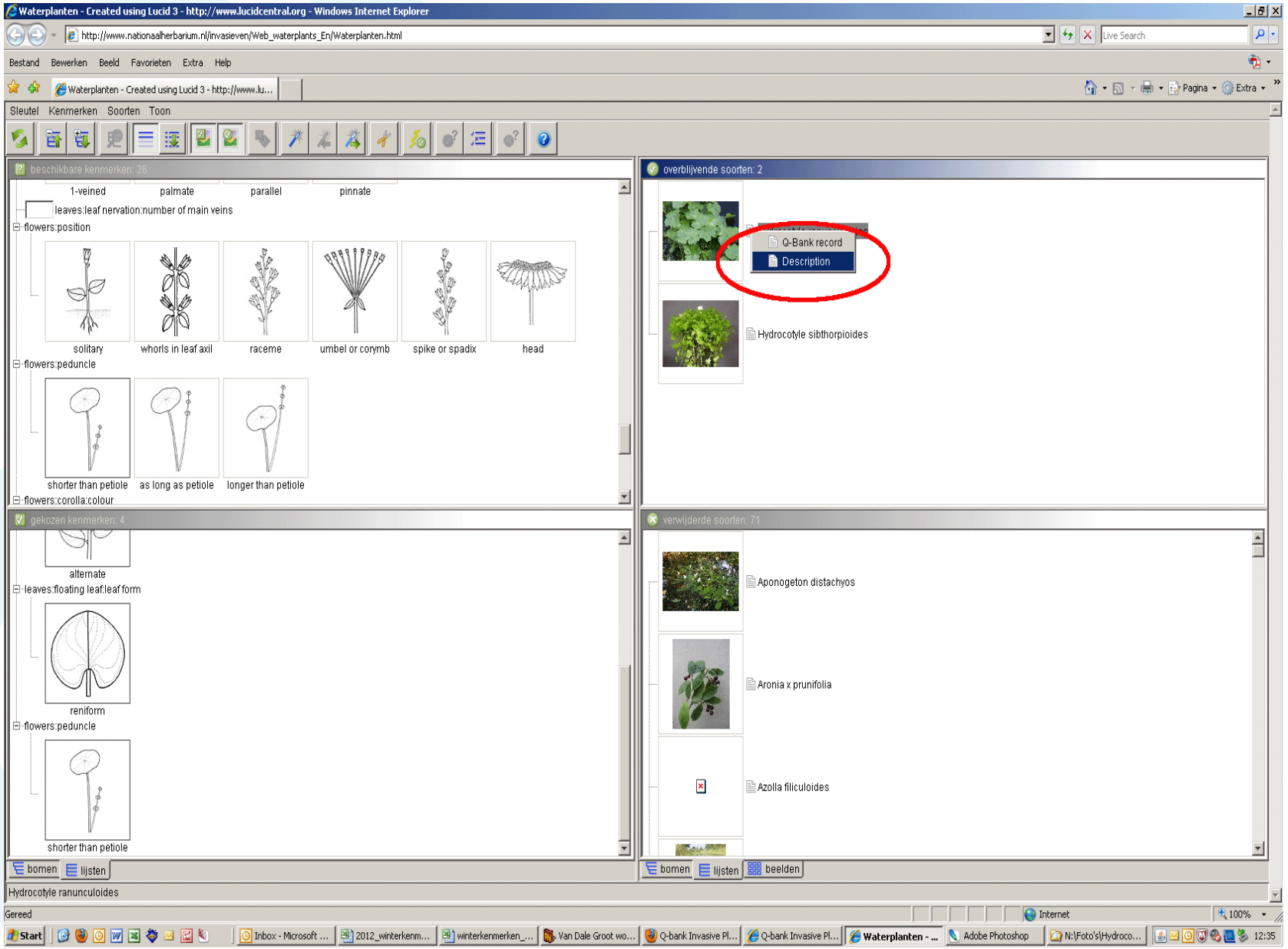
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longer than petiole
flowers:corolla:colour
overblijvende soorten: 2
Q-Bank record
Description
Hydrocotyle sibthorpioides
gekozen kenmerken: 4
alternate
leaves:floating leaf:leaf form
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flowers:peduncle
shorter than petiole
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Aronia x prunifolia
Azolla filiculoides
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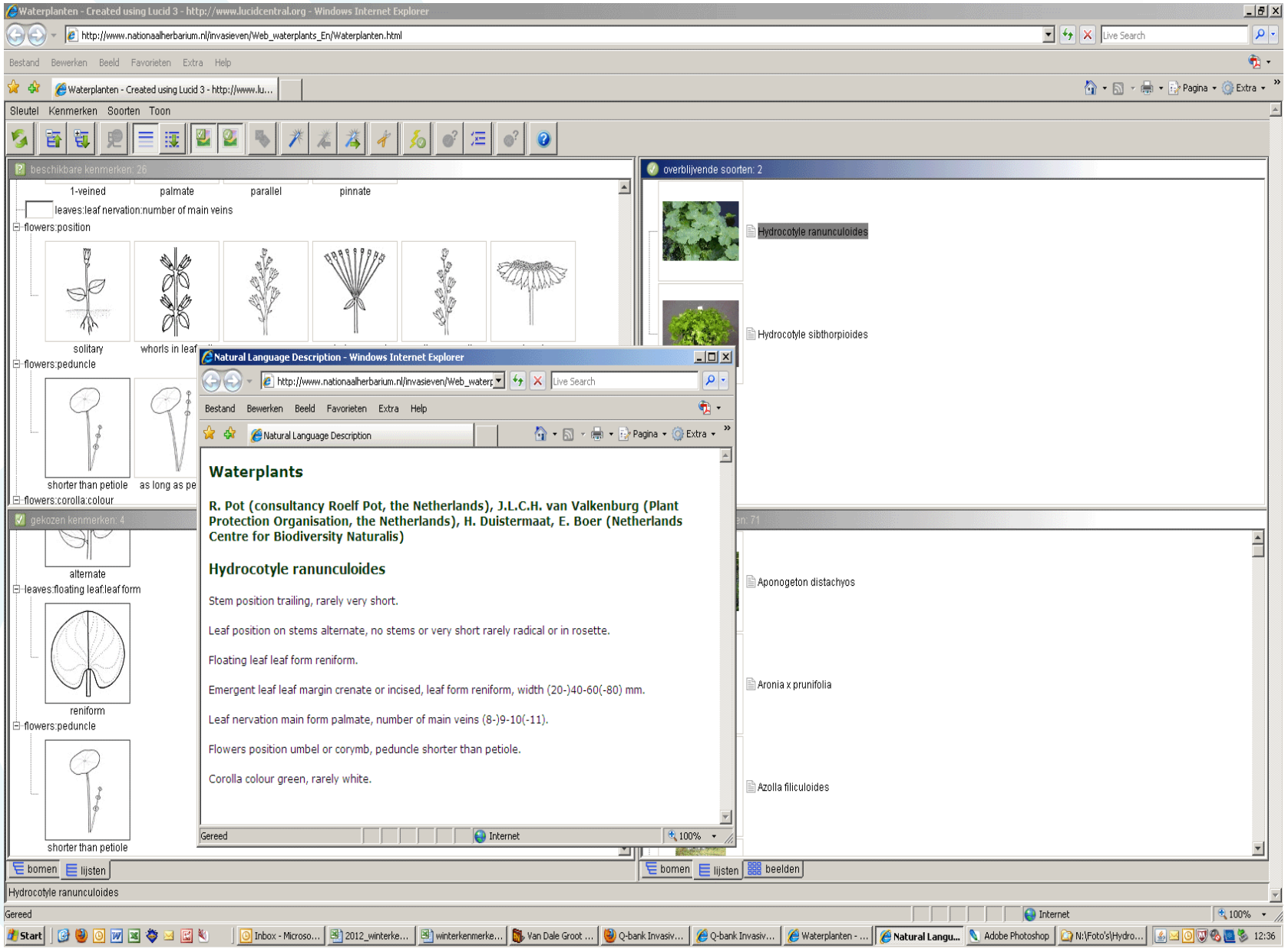
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flowers:position
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Hydrocotyle ranunculoides
Hydrocotyle sibthorpioides
Aponogeton distachyos
Aronia x prunifolia
Azolla filiculoides
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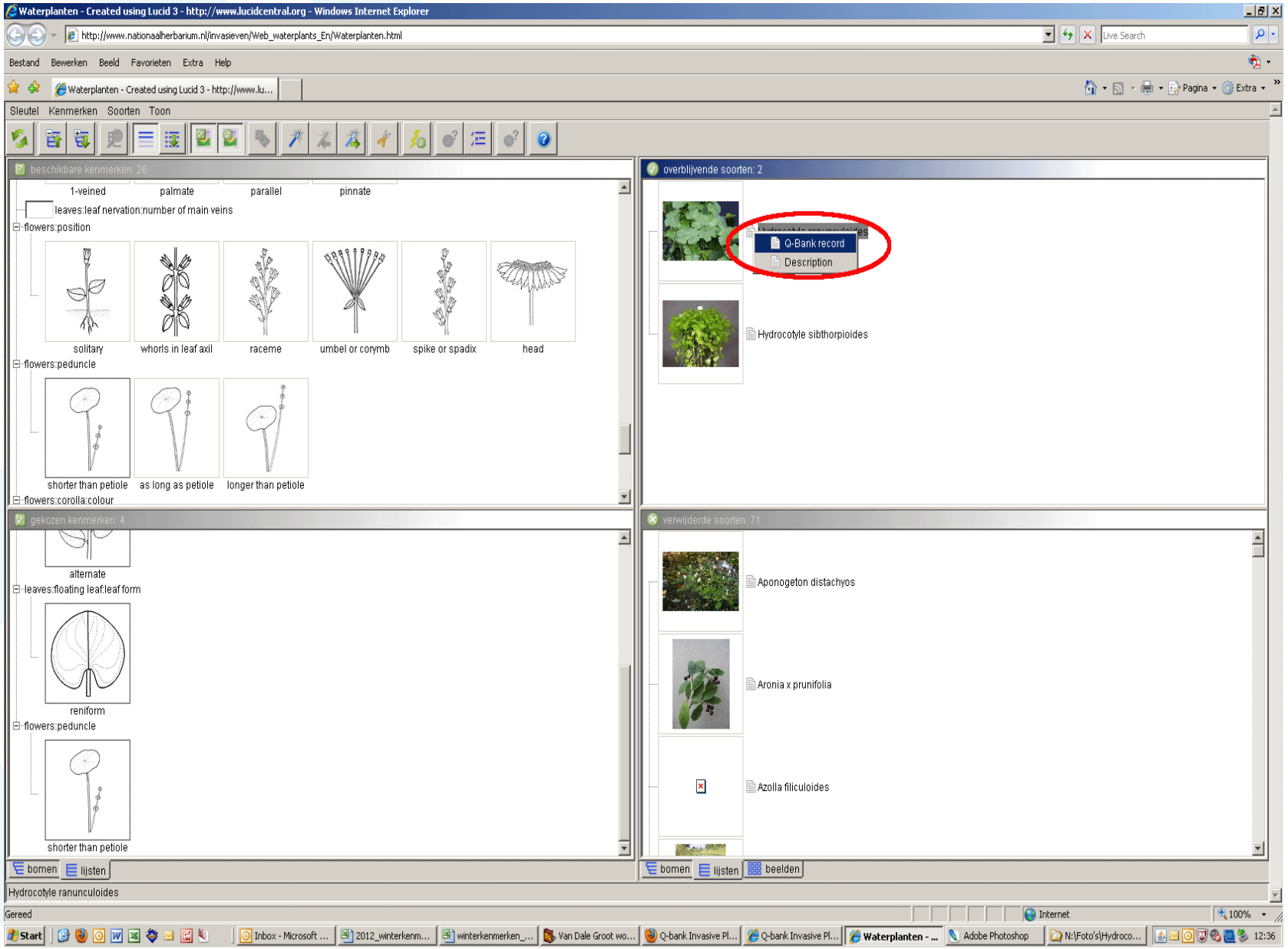
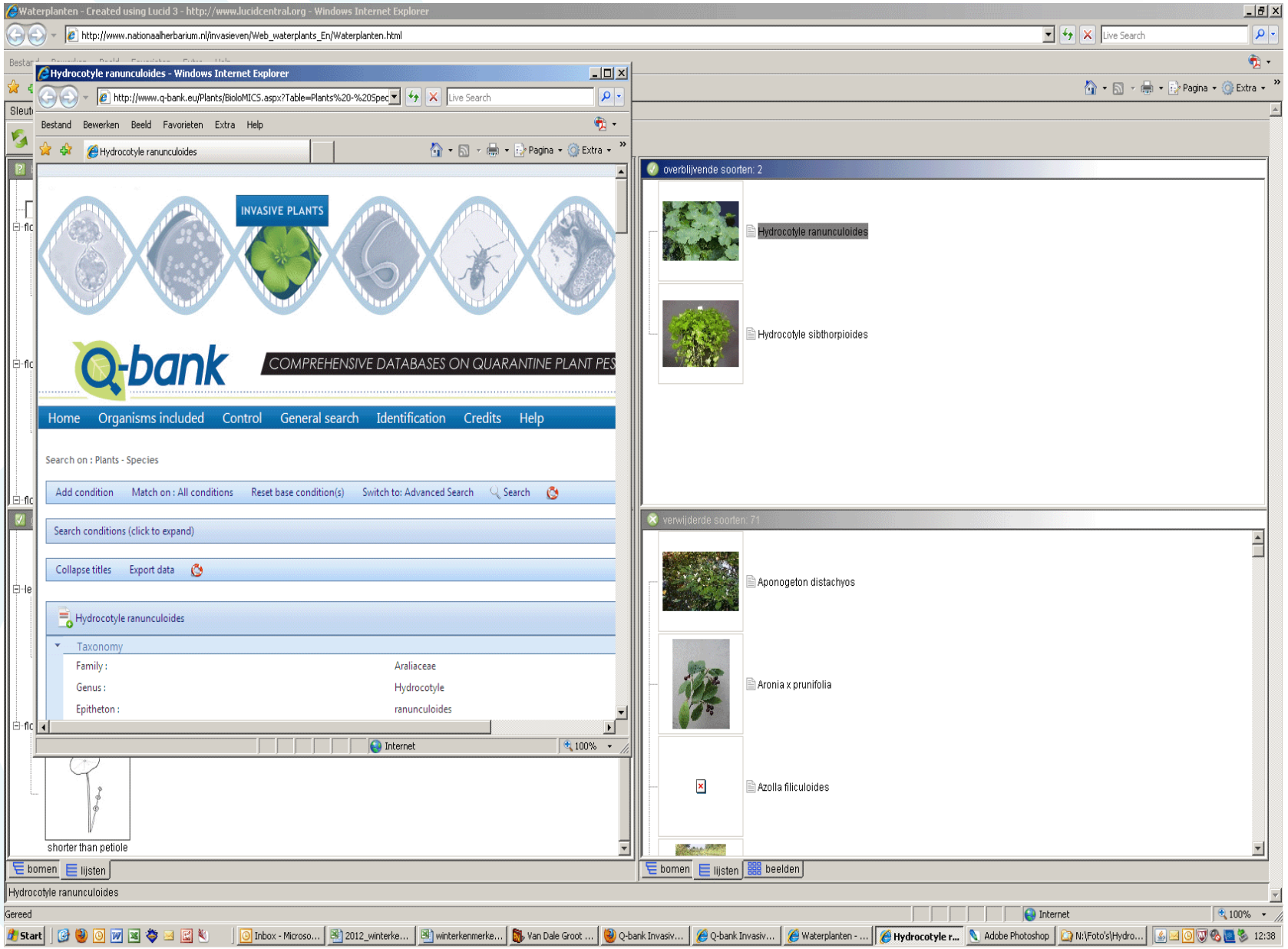
Hydrocotyle ranunculoides
Natural Language Description - Windows Internet Explorer
Natural Language Description
Waterplanten
R. Pot (consultancy Roelf Pot, the Netherlands), J.L.C.H. van Valkenburg (Plant Protection Organisation, the Netherlands), H. Duistermaat, E. Boer (Netherlands Centre for Biodiversity Naturalis)
Hydrocotyle ranunculoides
Stem position trailing, rarely very short.
Leaf position on stems alternate, no stems or very short rarely radical or in rosette.
Floating leaf leaf form reniform.
Emergent leaf leaf margin crenate or incised, leaf form reniform, width (20-)40-60(-80) mm.
Leaf nervation main form palmate, number of main veins (8-)9-10(-11).
Flowers position umbel or corymb, peduncle shorter than petiole.
Corolla colour green, rarely white.
Gereed
Internet
100%
Start
12:36

RINSE

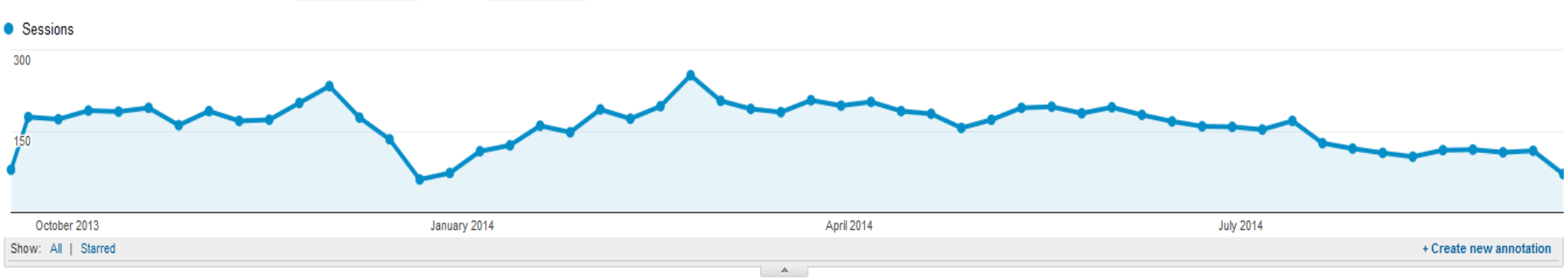

Waterplanten - Created using Lucid 3 - http://www.lucidcentral.org - Windows Internet Explorer
http://www.nationaalherbarium.nl/invasieven/Web_waterplants_En/Waterplanten.html
Bestand Bewerken Beeld Favorieten Extra Help
Sleutel Kenmerken Soorten Toon
beschikbare kenmerken: 26
1-veined
palmate
parallel
pinnate
leaves:leaf nervation:number of main veins
flowers:position
solitary
whorls in leaf axil
raceme
umbel or corymb
spike or spadix
head
flowers:peduncle
shorter than petiole
as long as petiole
longer than petiole
flowers:corolla:colour
overblijvende soorten: 2
Q-Bank record
Description
Hydrocotyle sibthorpioides
gekozen kenmerken: 4
alternate
leaves:floating leaf:leaf form
reniform
flowers:peduncle
shorter than petiole
verwijderde soorten: 71
Aponogeton distachyos
Aronia x prunifolia
Azolla filiculoides
bomen
lijsten
beelden
Hydrocotyle ranunculoides
Gereed
Internet
100%
Start
Waterplanten - ...
Adobe Photoshop
12:36

RINSE


Waterplanten - Created using Lucid 3 - http://www.lucidcentral.org - Windows Internet Explorer
http://www.nationaalherbarium.nl/invasieven/Web_waterplants_En/Waterplanten.html
Hydrocotyle ranunculoides - Windows Internet Explorer
http://www.q-bank.eu/Plants/BioloMICS.aspx?Table=Plants%20-%20Spec
Bestand Bewerken Beeld Favorieten Extra Help
INVASIVE PLANTS
Q-bank
COMPREHENSIVE DATABASES ON QUARANTINE PLANT PES
Home Organisms included Control General search Identification Credits Help
Search on : Plants - Species
Add condition Match on : All conditions Reset base condition(s) Switch to: Advanced Search Search
Search conditions (click to expand)
Collapse titles Export data
Hydrocotyle ranunculoides
Taxonomy
Family : Araliaceae
Genus : Hydrocotyle
Epitheton : ranunculoides
shorter than petiole
overblijvende soorten: 2
Hydrocotyle ranunculoides
Hydrocotyle sibthorpioides
verwijderde soorten: 71
Aponogeton distachyos
Aronia x prunifolia
Azolla filiculoides
bomen lijsten
bomen lijsten beelden
Hydrocotyle ranunculoides
Gereed
Internet
100%
Start
Inbox - Microso...
2012_winterke...
winterkenmerke...
Van Dale Groot ...
Q-bank Invasiv...
Q-bank Invasiv...
Waterplanten - ...
Hydrocotyle r...
Adobe Photoshop
N:\Foto's\Hydro...
12:38

Is it being used?

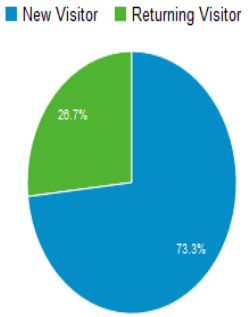
RINSE



Sessions	Users	Pageviews	Pages / Session	Avg. Session Duration	Bounce Rate
8,542	6,350	24,020	2.81	00:02:32	65.09%

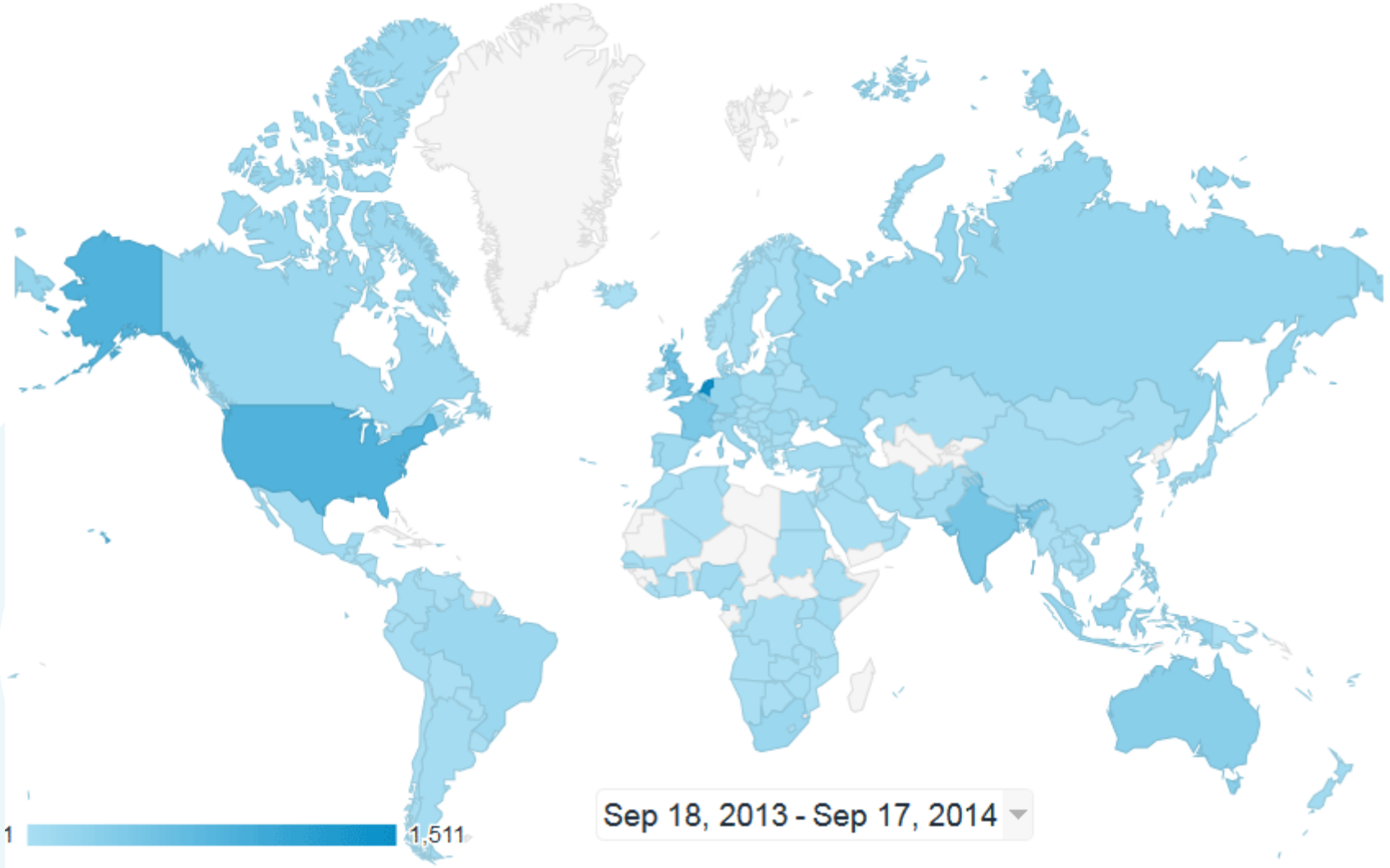
% New Sessions
73.26%

Sep 18, 2013 - Sep 17, 2014



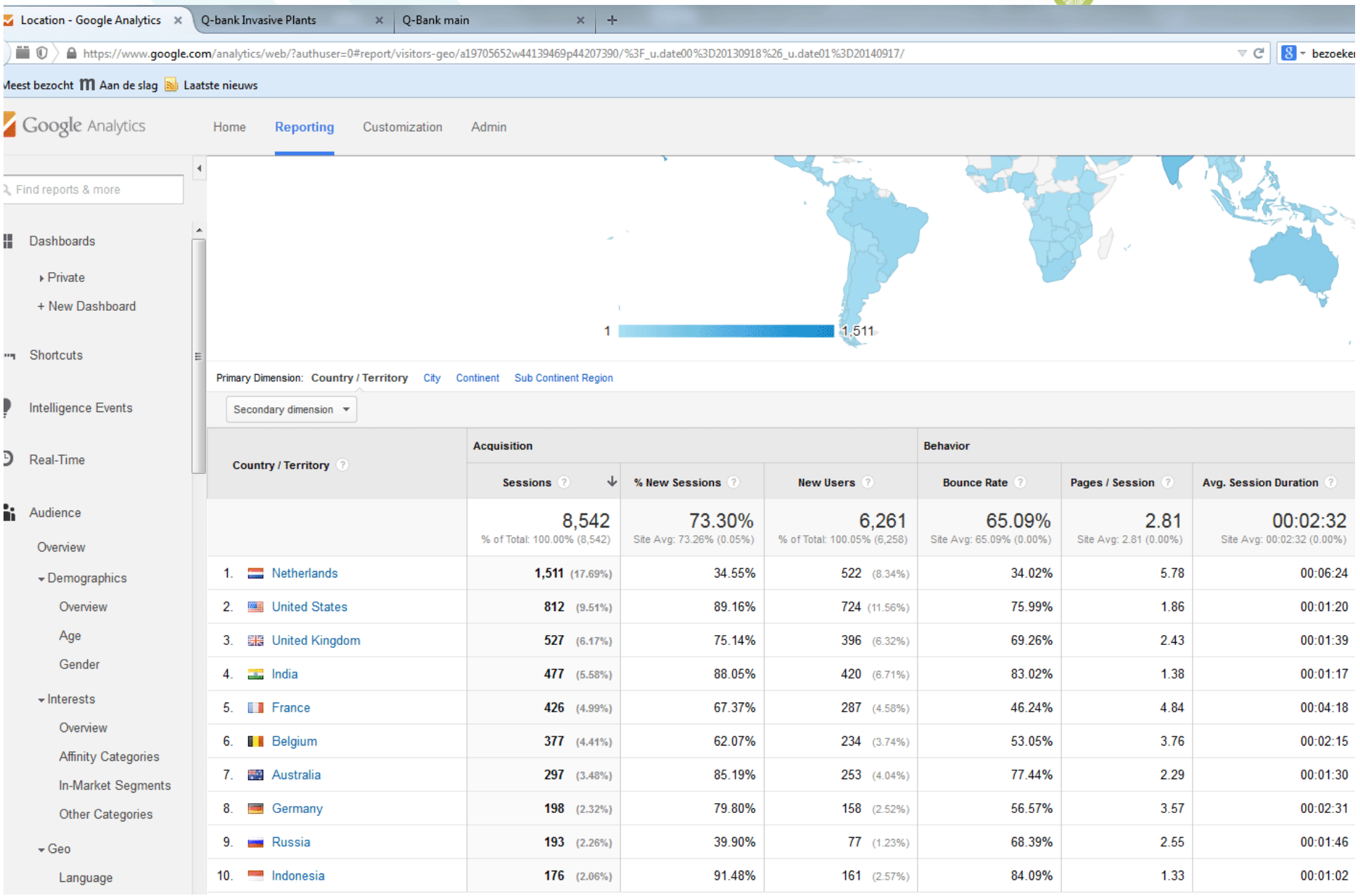
Where are the users?

RINSE



2-seas area users

RINSE



Country / Territory	Acquisition			Behavior		
	Sessions ↓	% New Sessions	New Users	Bounce Rate	Pages / Session	Avg. Session Duration
	8,542 % of Total: 100.00% (8,542)	73.30% Site Avg: 73.26% (0.05%)	6,261 % of Total: 100.05% (6,258)	65.09% Site Avg: 65.09% (0.00%)	2.81 Site Avg: 2.81 (0.00%)	00:02:32 Site Avg: 00:02:32 (0.00%)
1. Netherlands	1,511 (17.69%)	34.55%	522 (8.34%)	34.02%	5.78	00:06:24
2. United States	812 (9.51%)	89.16%	724 (11.56%)	75.99%	1.86	00:01:20
3. United Kingdom	527 (6.17%)	75.14%	396 (6.32%)	69.26%	2.43	00:01:39
4. India	477 (5.58%)	88.05%	420 (6.71%)	83.02%	1.38	00:01:17
5. France	426 (4.99%)	67.37%	287 (4.58%)	46.24%	4.84	00:04:18
6. Belgium	377 (4.41%)	62.07%	234 (3.74%)	53.05%	3.76	00:02:15
7. Australia	297 (3.48%)	85.19%	253 (4.04%)	77.44%	2.29	00:01:30
8. Germany	198 (2.32%)	79.80%	158 (2.52%)	56.57%	3.57	00:02:31
9. Russia	193 (2.26%)	39.90%	77 (1.23%)	68.39%	2.55	00:01:46
10. Indonesia	176 (2.06%)	91.48%	161 (2.57%)	84.09%	1.33	00:01:02

Thank you very much for your attention