Nikita Sajeev and Vera Veltkamp
Wageningen, The Netherlands

www.genesproutinitative.com

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GeneSproutInitiative

GENESPROUT INITIATIVE

PlantEd

COST Action CA18111
Genome Editing in Plants

cost
EUROPEAN COOPERATION IN SCIENCE & TECHNOLOGY

Who are we

A young researcher Initiative

Our Story

Why we came together

- Decision of the EU disrupts innovation surrounding CRISPR/Cas
- Lack of young researcher involvement in decision making
- Lack of open dialogue with the public

About GeneSprout

Our Goals

A young researcher initiative for open dialogue on new plant breeding techniques and the policy thereof

Stimulate Open Dialogue

We host dialogue sessions to stimulate discussions on New Plant Breeding Techniques, their policy and implications in global agriculture.

Change EU policy

We want to change the current EU policy to enable the use of New Plant Breeding Techniques in a responsible manner.

Represent Young Researchers

We aim to give a voice to students and young plant researchers on the topic of New Plant Breeding Techniques and their policy.

About GeneSprout

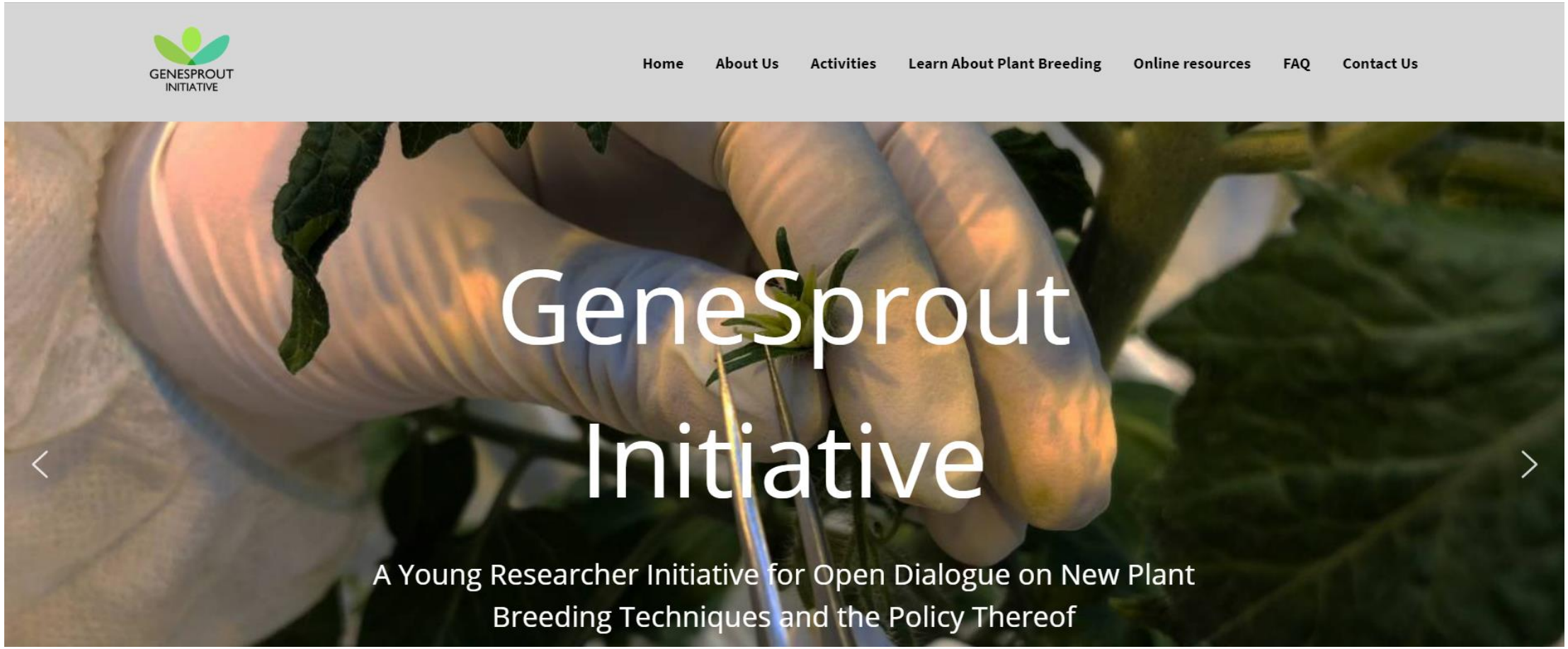
Stimulate Open Dialogue

Events: Discussions, workshops, debates

About GeneSprout

Stimulate Open Dialogue

Social Media presence and open access information



About GeneSprout

Change policy

Plant and Patents
Wageningen
Oct 2019

COGEM symposium
Den Hague
Oct 2019

Europa Biotech Week
Brussels
Sep 2019

Workshop for young politicians
(D66)
Wageningen University
Oct 2019

About GeneSprout

Represent young researchers

Internationalization

GeneSprout Belgium

We are looking for ambassadors in other EU countries to start a branch
Contact us!

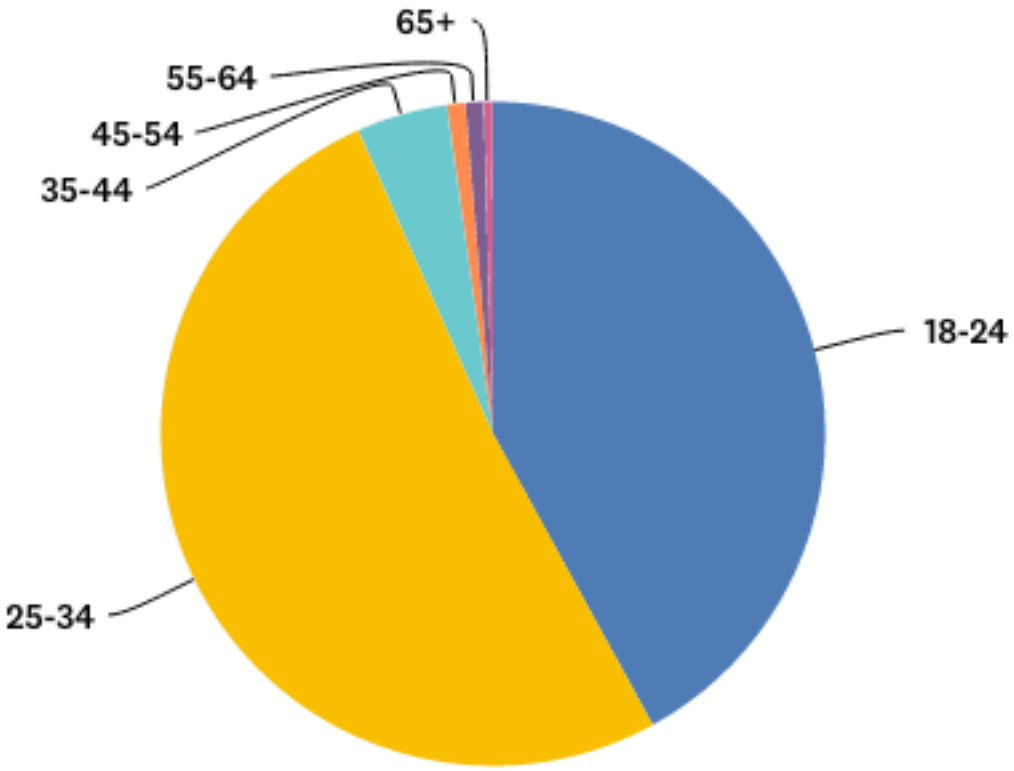
About GeneSprout

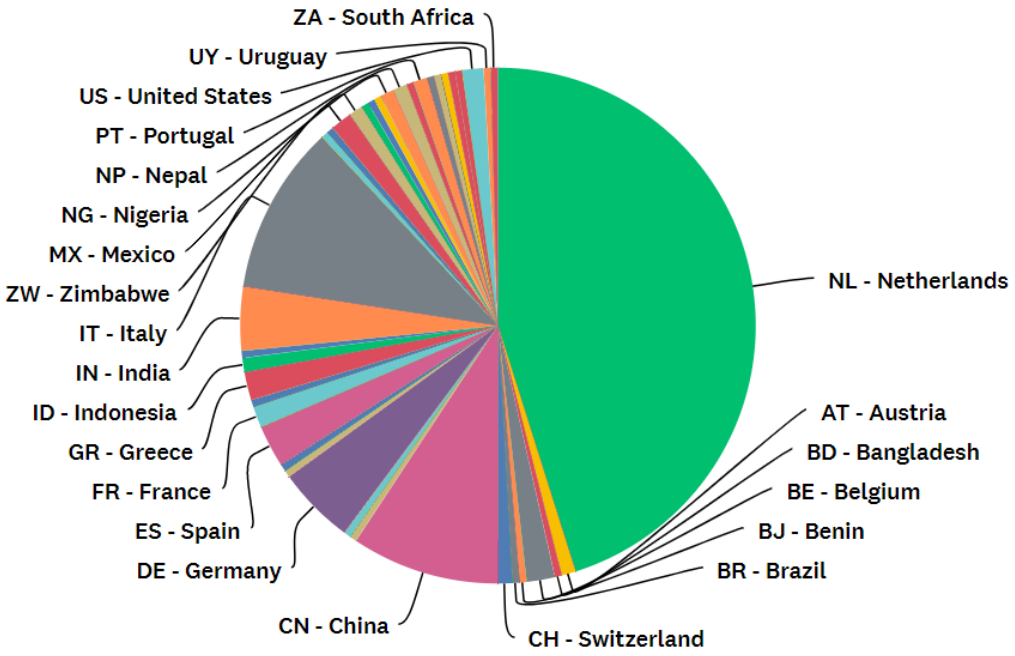
Represent young researchers

Survey conducted on **New plant breeding techniques** (NPBTs)
amongst young plant researchers and students in the Netherlands
N~230

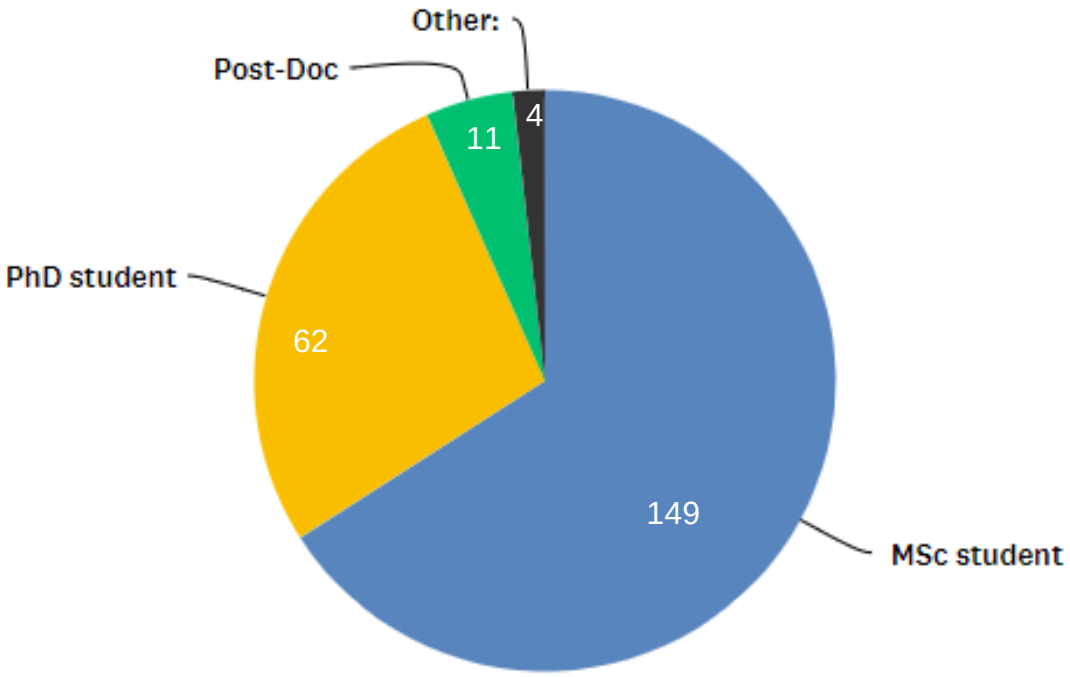
Who were the participants?

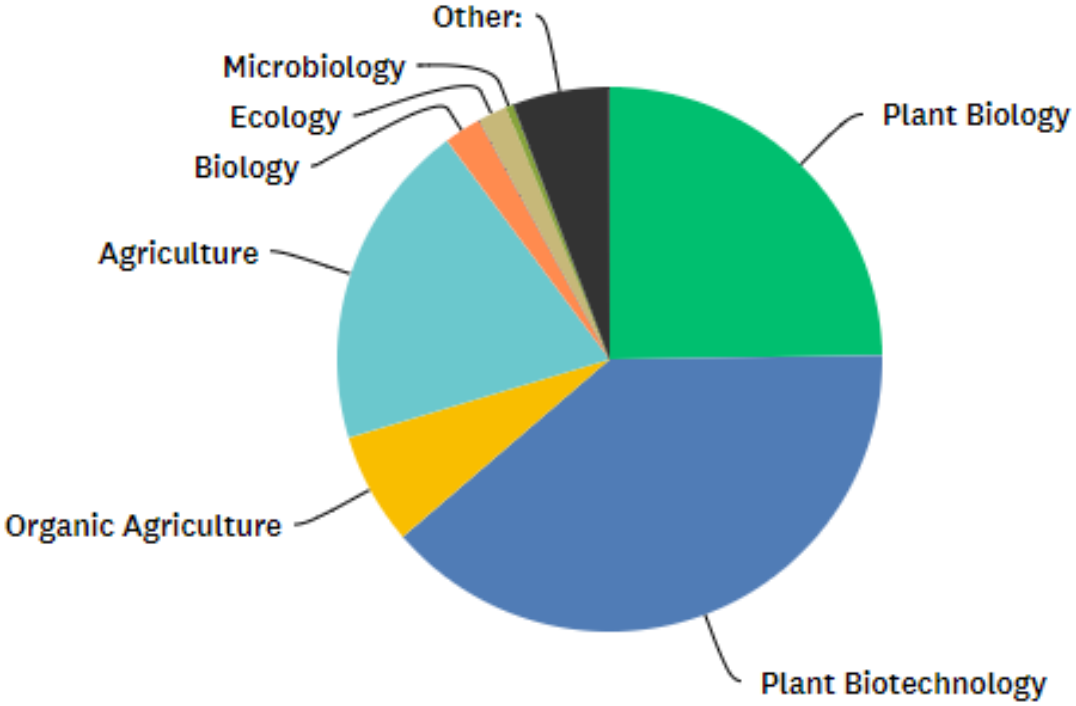
Mostly young people, lot's of nationalities



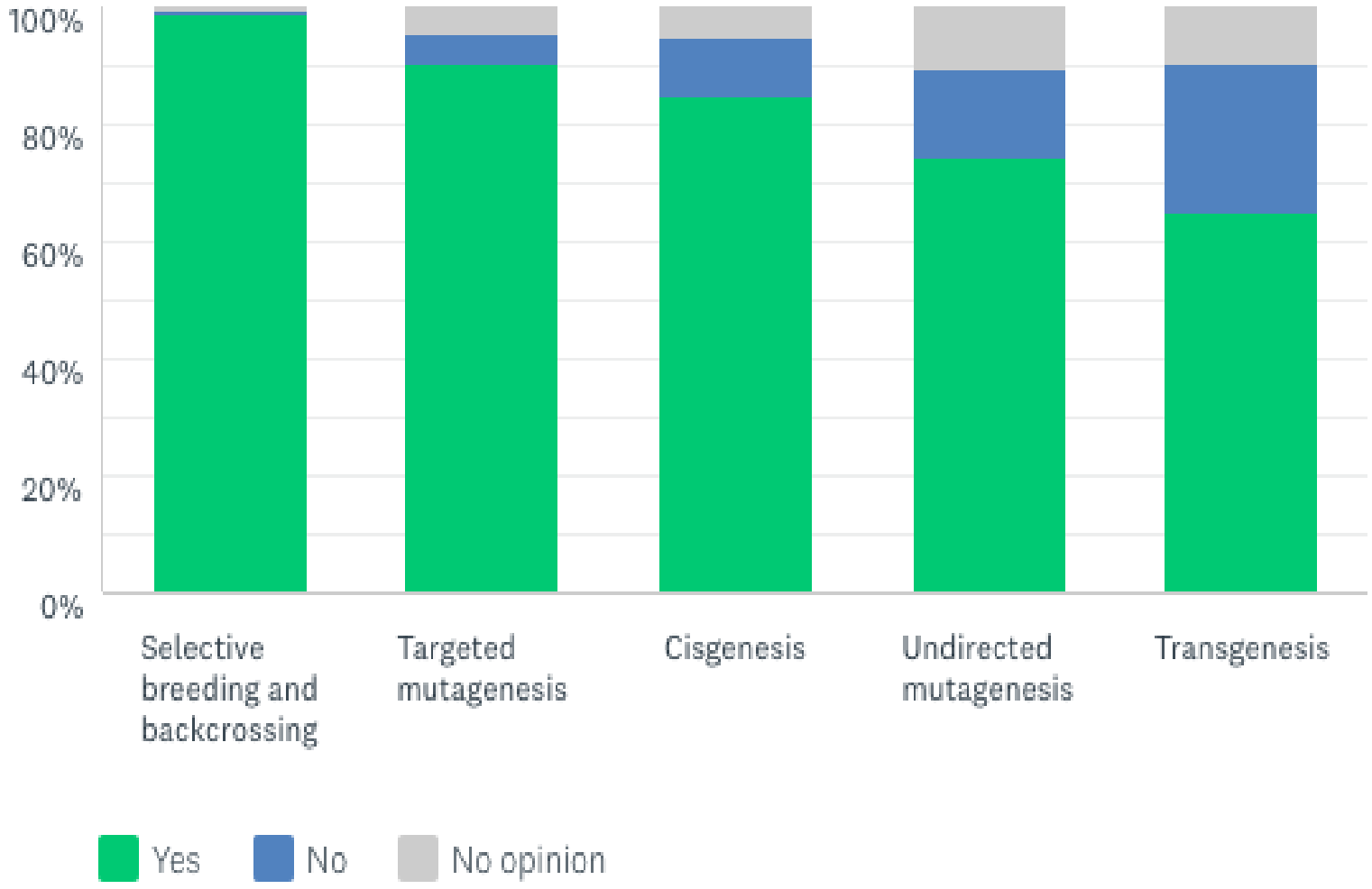


Designation and background





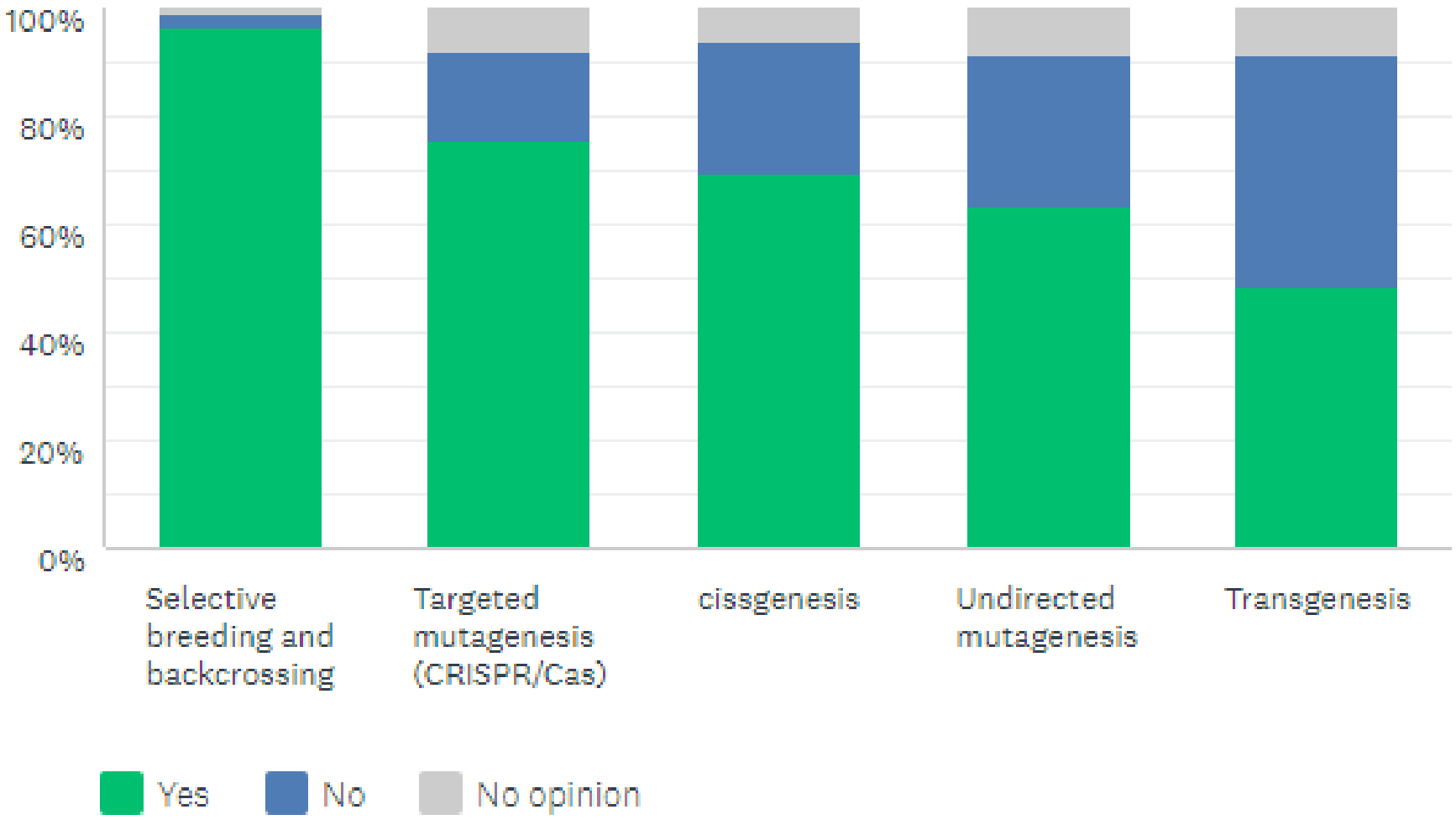
Would they consume NPBTs products?



Majority of the young researchers residing in the Netherlands....

1. Did not consider the breeding process used relevant for consumption
2.
3.
4.
5.
6.

The use of NPBTs in Organic Agriculture



Majority of the young researchers residing in the Netherlands....

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2. Could see the benefits of NPBTs in organic agriculture
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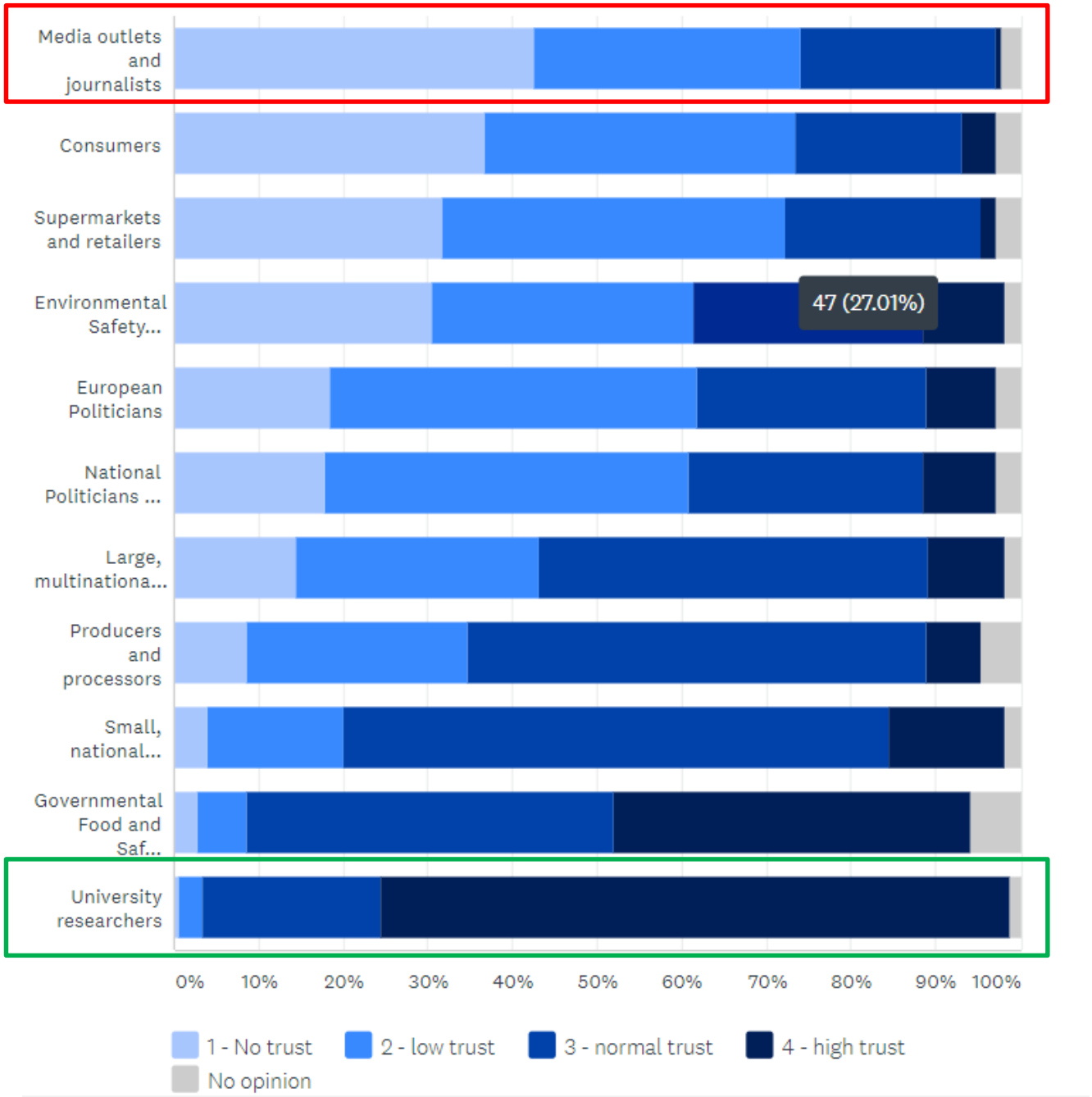
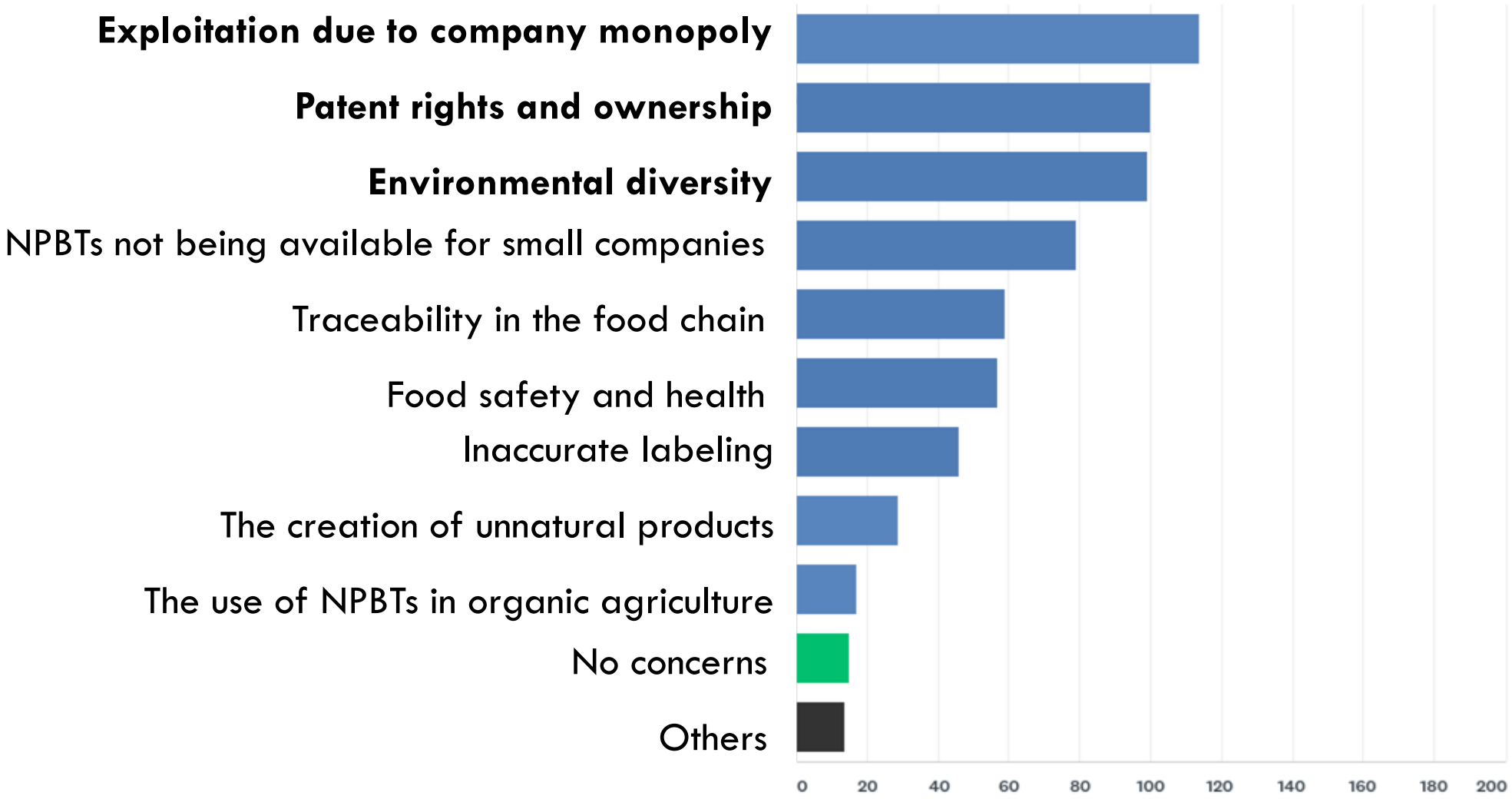
Who do you trust?



Biggest Concern regarding the use of NPBTs



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1. Did not consider the breeding process used relevant for consumption
2. Could see the benefits of NPBTs in organic agriculture
3. Their biggest concern is Monopolization, ownership and Biodiversity
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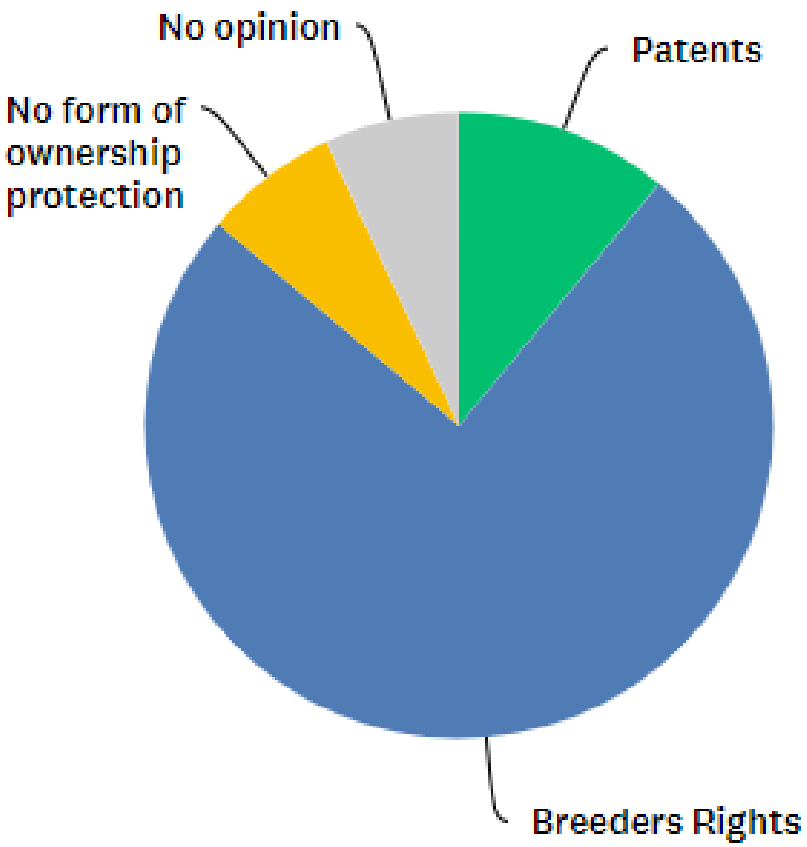
How to define ownership of traits?



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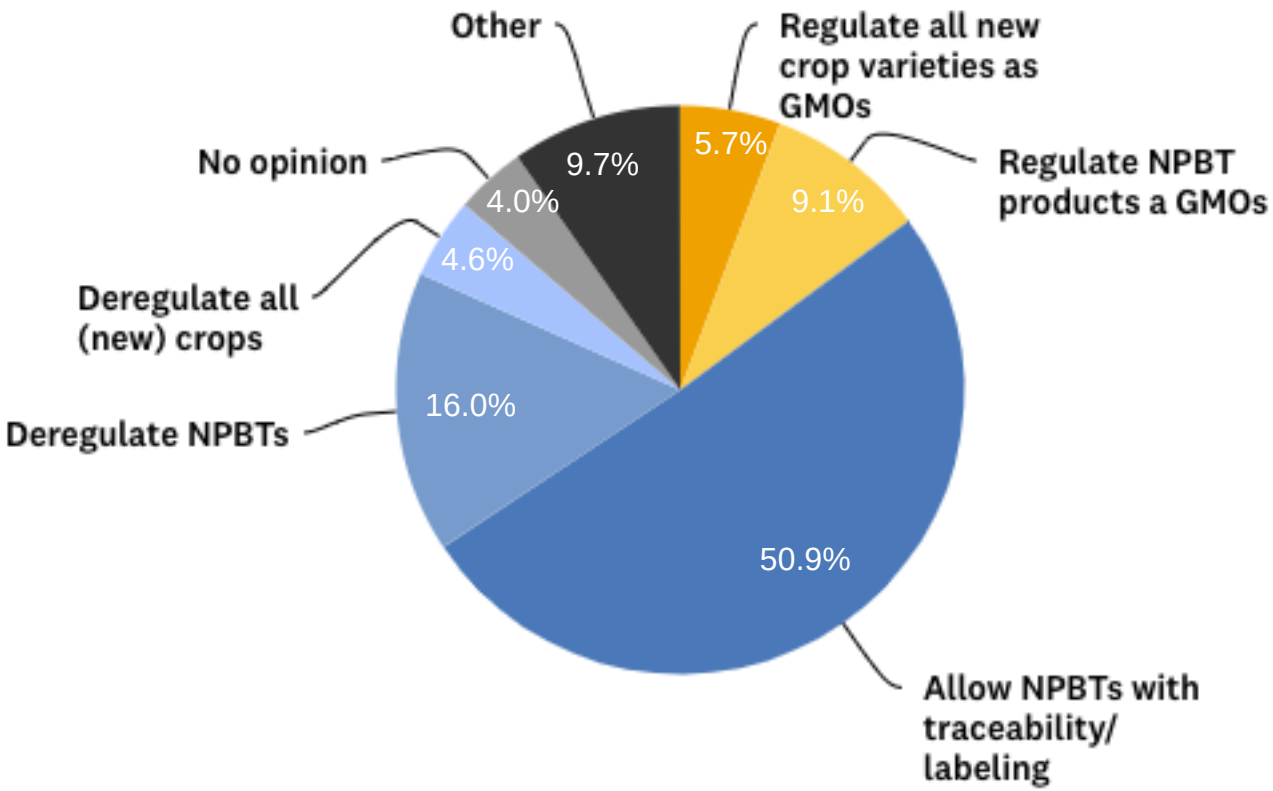
1. Did not consider the breeding process used relevant for consumption
2. Could see the benefits of NPBTs in organic agriculture
3. Their biggest concern is Monopolization, ownership and Biodiversity
4. Would like Breeders rights and not Patents when it comes to ownership of crops edited using NPBTs
5.
6.

Which regulation would you find the most ideal for NPBTs in agriculture?

The NPBTs, in this case is targeted mutagenesis with the help of techniques like CRISPR/Cas, TALENs and Zinc Finger Nucleases where there is no trace of recombinant (foreign) DNA.



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5. Would like plants edited using NPBTs to be traceable
6. Would like the freedom of choice. E.g. by labelling

The ideal policy for us

"We advocate that plant varieties made using targeted mutagenesis techniques in which the final product does not contain traces of foreign DNA, should be exempted from regulations that apply to conventional GMO's"

Breeders exemption must be possible for these products even when patented.

NPBTs

Final thoughts

Using NPBTs is not going to solve the global food crisis by itself…

… but it can be a powerful tool to bring more nutritional, more climate-tolerant, more disease-resistant and more salty-soil tolerant crops to the market faster.

Take-home message

We want to inspire young students and researchers all over the world, that we can and must have a voice in policy that will dictate our own future.

As next generation plant scientists, it is our responsibility to communicate and have open dialogues about our research with the general public.

Small steps lead to bigger ones.

Acknowledgements

dr.ir. JE (Ernst) van den Ende

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Professor L.O. (Louise) Fresco

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WAGENINGEN UNIVERSITY & RESEARCH

QUESTIONS & DISCUSSION