

Plant Breeding Coordinating Committee Initiatives to Improve Communication

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Introduction

Improving communication within the plant breeding community and with diverse stakeholders, is a shared goal of the Plant Breeding Coordinating Committee and NAPB. These groups have developed new forms of communication that are becoming increasingly available and utilizing them effectively would allow us to better inform our selected audiences.

Objectives

The PBCC, in cooperation with NAPB, has explored ways to provide multi-modal resource materials for the plant breeding community. These resources address traditional STEM written and oral communication, but also science-art collaborations, blogs, infographics, and digital media.

Outcomes

- We have developed infographics that present fundamental principles and impacts of plant breeding to the public, including young people accustomed to impactful graphics ("Incredible Feats of Plant Breeding" and "Fantastic Discoveries in Plant Breeding"). These comic book-style one-pagers are digitally available on the PBCC website. (https://www.nrsp10.org/PBCC_plant_breeding_outputs)
- A graduate student video contest was also undertaken to promote the importance of germplasm resources to the future of sustainable crop production as well as the value of graduate education in plant breeding. (https://www.nrsp10.org/PBCC_student_videos)
- Kantar et al (2023) present general communication strategies that can be incorporated into any graduate agricultural science course that wishes to enhance students' communication skills with diverse audiences. (<https://doi.org/10.1002/ael2.20115>)
- A template on how to write a blog and tips for speaking to non-scientific audiences are also downloadable. (<https://www.plantbreeding.org/files/napb/science-communication-for-plant-breeding-tips-combined.pdf>).

Science Communication for Plant Breeding Tips

How to write a blog on your research?

- Keep things short. A good length for a blog post is 500 to 800 words.
- The primary audience for this blog is the general public. So:
 - Start with the question (the one assigned), and make sure your conclusion addresses the question again
 - Keep your explanations simple
 - Don't worry about being an absolute subject-matter expert. Being relatable is the most important factor in blogging
 - Avoid technical terms and jargon
 - Use a conversational, informal tone
 - Write with examples for your points whenever you can
 - Use concrete, specific language in your post
 - The goal is for the post to read at the 8th grade level
- Identify photos to go along with your post, whenever possible, these are more memorable than the text
- A good way to check the reading level is the hemingway application <http://www.hemingwayapp.com/>

How to message your research?

- Keep things short.
- Follow the message triangle:
 - Key point one (Broad), with up to three supporting sub-points
 - Key point two (Narrow), with up to three supporting sub-points
 - Key point three is the call to action
- The primary audience is the general public.
 - Start with the question and make sure your key point answers this question
 - Keep your explanations simple
 - Avoid technical terms and jargon
 - Use a conversational, informal tone
 - Make sure your examples relate to your key points
 - Avoid tangents that are scientifically interesting but not related to your key point
 - Use concrete, specific language
- Use data and facts woven into stories to make your message more relatable

Tips for speaking to non-scientific audiences

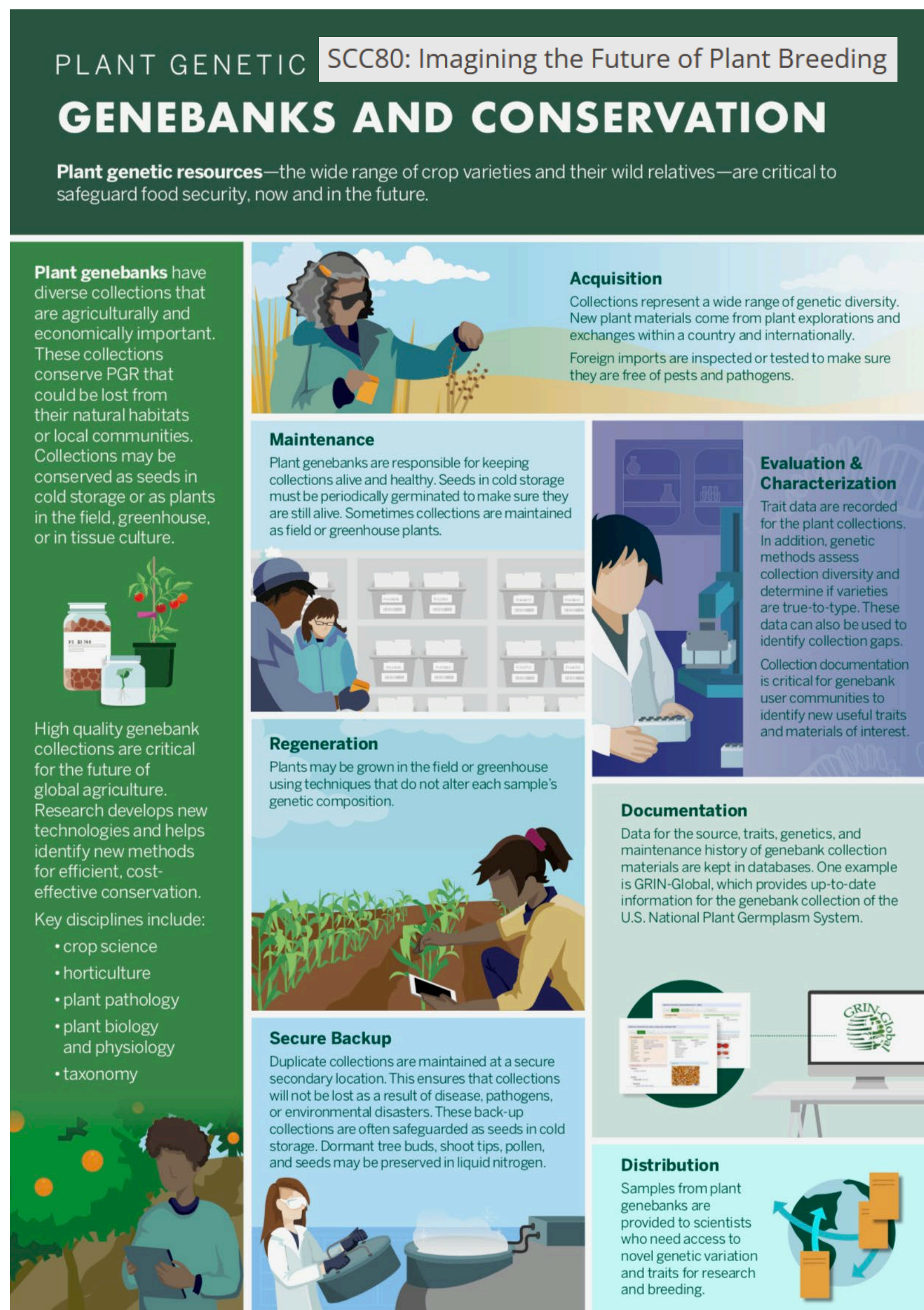
- You are more interesting than your science
 - How is science part of your everyday life?
 - How did you come up with the question you were asking?
 - What were the problems associated with doing the experiments?
- Body Language
 - Speak clearly (usually this means slowing down)

Topical Info-Graphics

1. Global Food Security



2. Genebanks and Conservation



SCC80: Imagining the Future of Plant Breeding

Comic Book Style One-Pagers

1. Incredible Feats of Plant Breeding



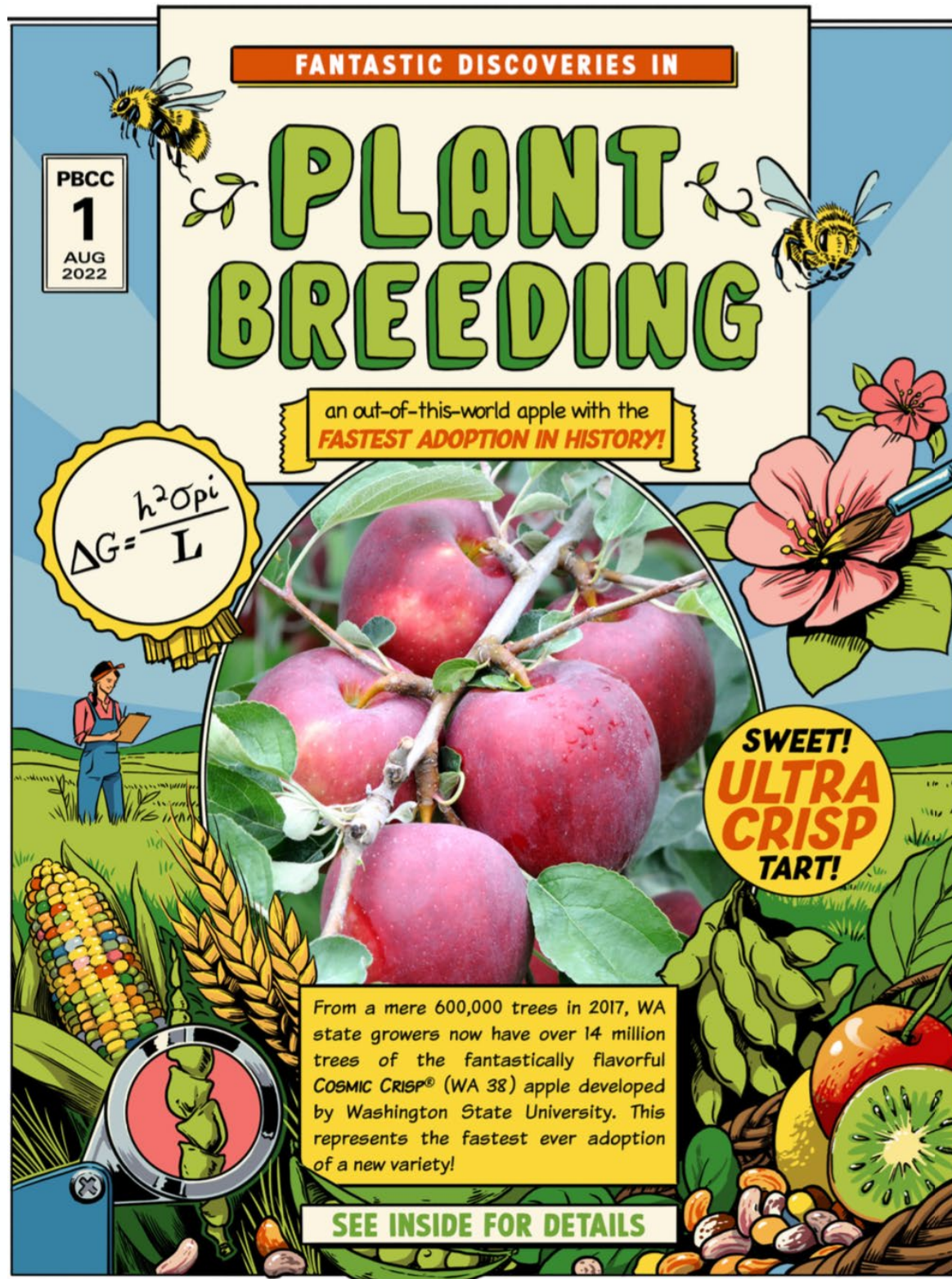
Desert Sister of Common Beans to the Rescue!

front cover

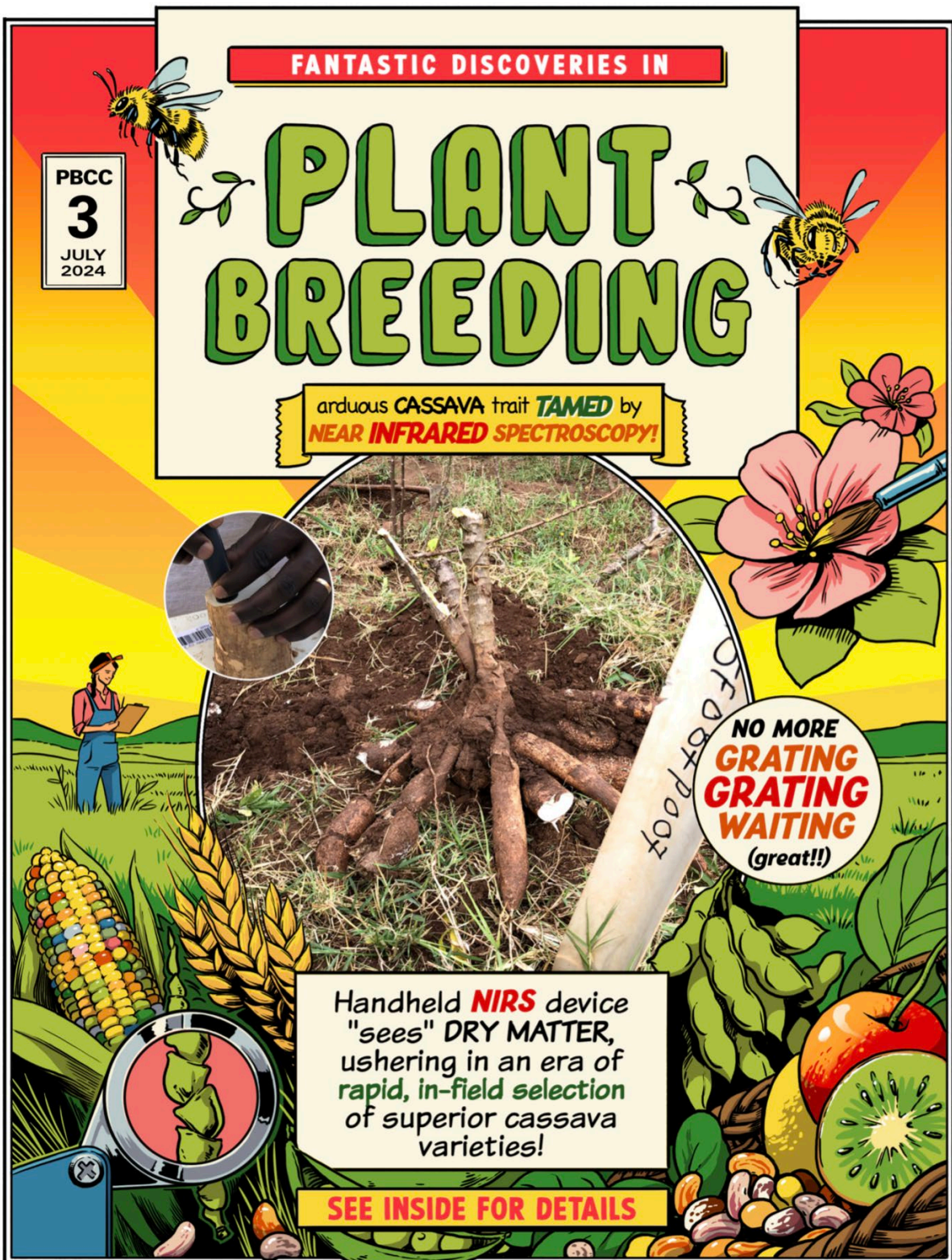


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2. Fantastic Discoveries in Plant Breeding



An Out-of-This-World Apple with the Fastest Adoption in History



Arduous Cassava Trait Tamed by Near Infrared Spectroscopy!

We would appreciate you sharing these within your organization and with your stakeholders.

(https://www.nrsp10.org/PBCC_plant_breeding_outputs)

References

Kantar, M., D. Wang, I. Hale, R.C. Pratt, J.V. Jensen, B.V. Lewenstein. 2023. Improving science communication in the agricultural sciences through intentionality. *Agriculture and Environmental Letters* 8(2) DOI: [10.1002/ael2.20115](https://doi.org/10.1002/ael2.20115)

Interested in helping with communication?

Please contact any of the authors if you would like to share ideas or assist our continuing efforts to enhance public awareness and appreciation of plant breeding.