



La perspectiva de un clone para los DOI



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DOIs - Opciones complementarias

- Estado basal:
 - 100% *In Trust* accessions assigned DOIs
 - 100% accessions in MLS assigned DOIs?
- Asignar nuevos DOI cada nuevo SMTA
 - Every transfer gets new DOI to recipient material
 - If purpose is tracking, this will help
 - 90%+ DOIs will be dead ends
- Cada cultivo/uso determina cuándo o si se asigna un nuevo DOI
 - Only assign new DOIs when needed or useful
 - Require compliance and understanding by users

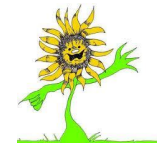


Que son DOIs

doi.org/10.18730/CKR7	CIP 706775
doi.org/10.18730/CR94	CIP 707011
doi.org/10.18730/9058	CIP 700739
doi.org/10.18730/92F8	CIP 701013
doi.org/10.18730/963D	CIP 701531
doi.org/10.18730/9CZB	CIP 702407
doi.org/10.18730/9F57	CIP 702698
doi.org/10.18730/9KF\$	CIP 703296
doi.org/10.18730/9KJ0	CIP 703299
doi.org/10.18730/9W1C	CIP 703648
doi.org/10.18730/9W2D	CIP 703649
doi.org/10.18730/9ZA6	CIP 703765

Selecciones basadas en semillas

Sharing of
intermediate
 F_{2-10} seed



DOI 4-9

50 seed each



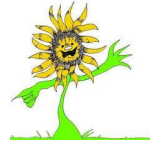
DOI 1

X



DOI 2

Sharing
of pre-
breeding
 F_1 seed

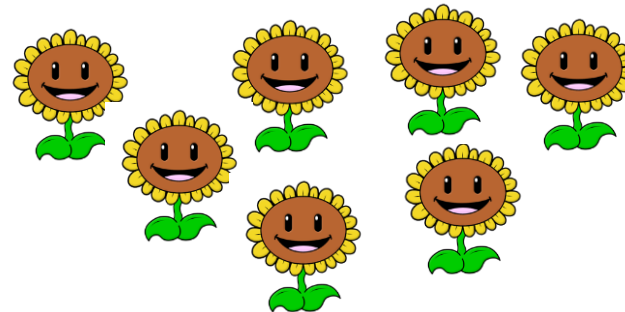


DOI 3

10% best
back-crossed
to parent

F_1 = 10K-100K
undesirable plants

1-15 F_{6-15} seed lots to
multifield trials

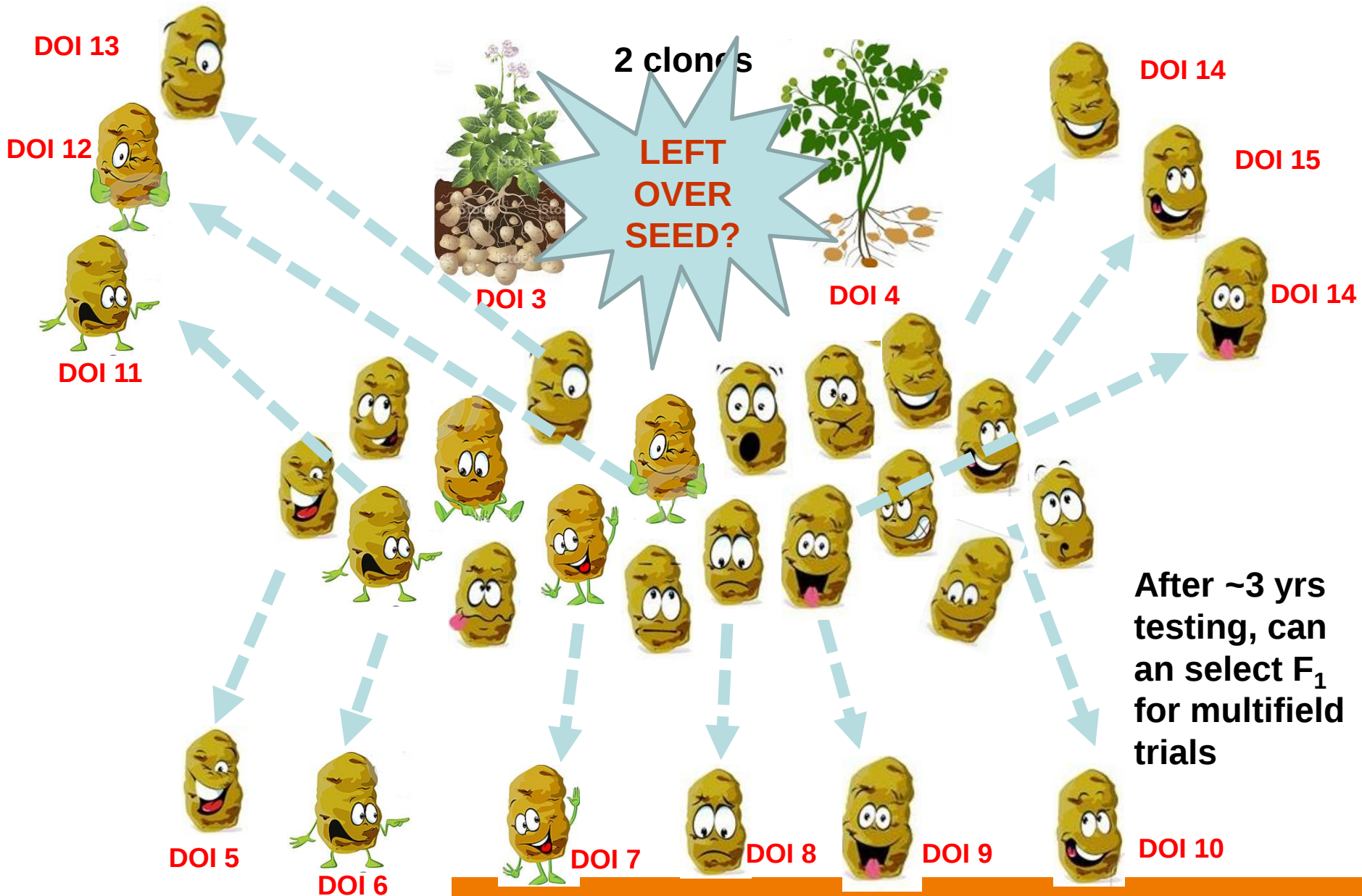


DOI 9-25

NARS 1 selects lines

¡Aquí vienen los clones!

NARS 2 selects lines



Después de los ensayos de campo, los clones seleccionados son liberados por NARS

DOI 5



DOI 6 & 11



DOI 7



DOI 8



DOI 9 & 14



DOI 10 & 15



DOI 18 & 20

DOI 19 & 22

DOI 16 & 21

DOI 17 & 23

NARS 1

DOI 6 & 11



DOI 8



DOI 16

DOI 10 & 15



DOI 17

NARS 2

DOI 6 & 11



DOI 18

DOI 9 & 14



DOI 10 & 15



DOI 7



DOI 19

ONG 1

DOI 6 & 11



DOI 20

DOI 8



DOI 21

DOI 10 & 15



DOI 23

DOI 7



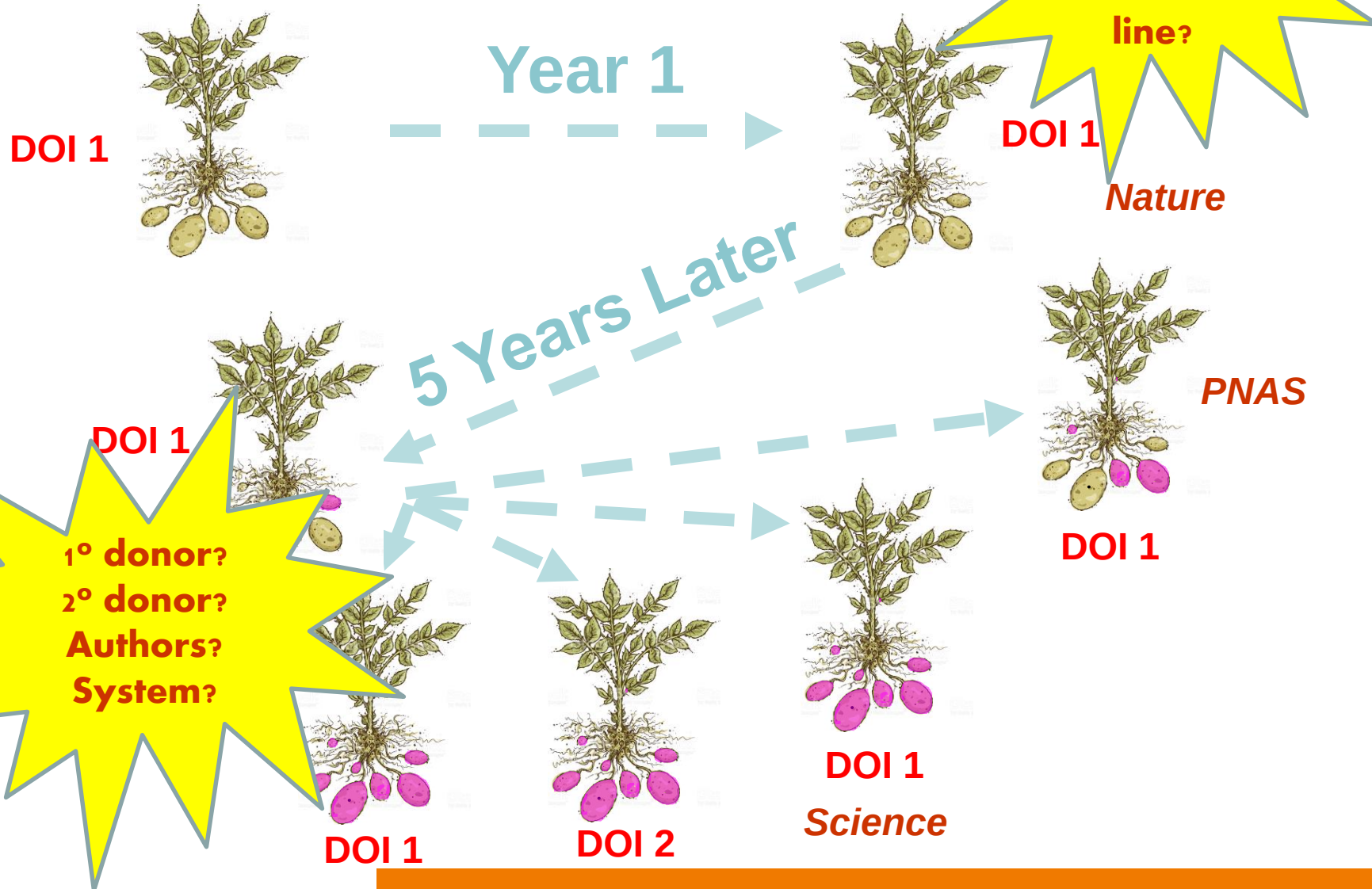
DOI 22

¿Cuál es el estado de las colecciones?

- Increasing reports of mixes in GR collections
 - Arabidopsis seed germplasm, genetic stocks, mapping populations, tagged lines, etc.
 - Not unique to plants – also huge challenge in medical and microbial fields
- The GLIS is only as good as the information provided to it
- Errors not only jeopardize the GLIS but also the BSF
- If there is distrust, people will not use it



Fidelidad de germoplasma

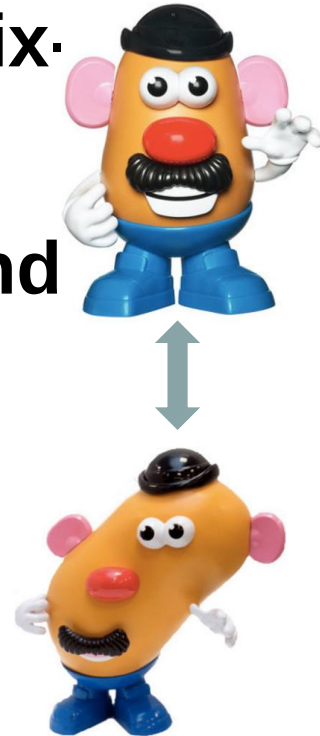


¿Cómo se ve?



¿Cuándo y cómo ocurren los errores?

- Absolutely no clue when or how the mix-ups happened
- No correlation with anything we can find
- All collections affected – todos
- If the Material is wrong, the associated information may also be wrong
- And the information in GLIS will be wrong



DOIs y la verificación de identidad

- Would DOIs have helped our misidentity situation?
 - Likely, no
 - However DOIs would have allowed us to know when this problem happened!
- The entire in vitro (clonal) CIP potato and sweetpotato collections are now DNA fingerprinted
 - Enabling DOIs to be linked to these DNA fingerprints into perpetuity
- This will add genetic fidelity to the GLIS



¡SOMOS RESPONSABLES!



- DOIs are a tool for tracking use and related information – measure impact
- Currently, we lack tools to do this
- DOIs may not be the panacea – they will not solve all our problems – but they are a first step!
- A year ago, I argued publicly against DOIs
- As a genebank manager, I now see a need, value and justification for a GLIS



En resumen

- It is in our best interests to ensure DOIs work
- It will not be *“If we build it they will come”*
 - It will be a very, very hard sell to fully implement
 - We will have to take users by the hand, pamper them, bribe them, show it to them
 - Look at the “easy SMTA”
- We need to show users the benefit of using DOIs = show impact
 - How will it help users?
 - Talk is not enough
- For me, >60% tracking & <40% identity