

SA Academic perspective: GEd Innovation

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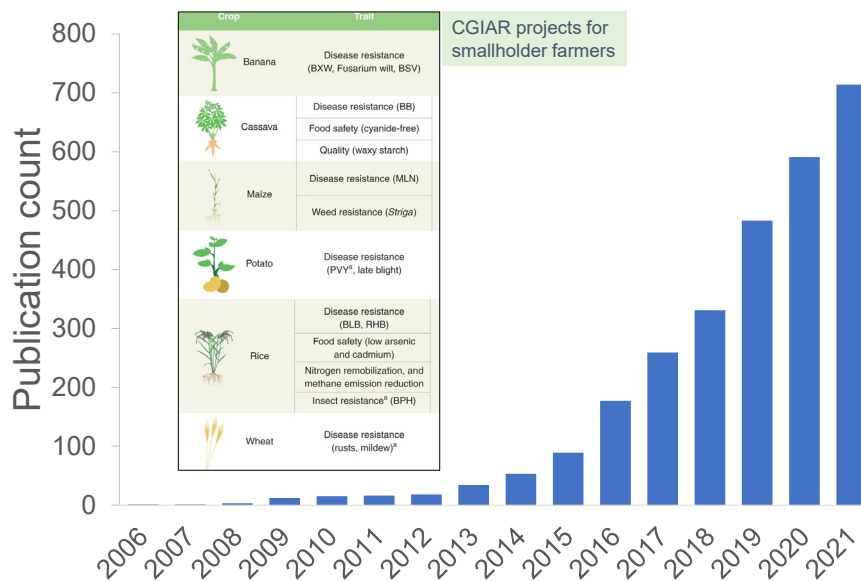


Session: GEd Innovation management
28 September 2023
4th Sustainable Bio-Innovation Symposium



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International publications – plant gene editing



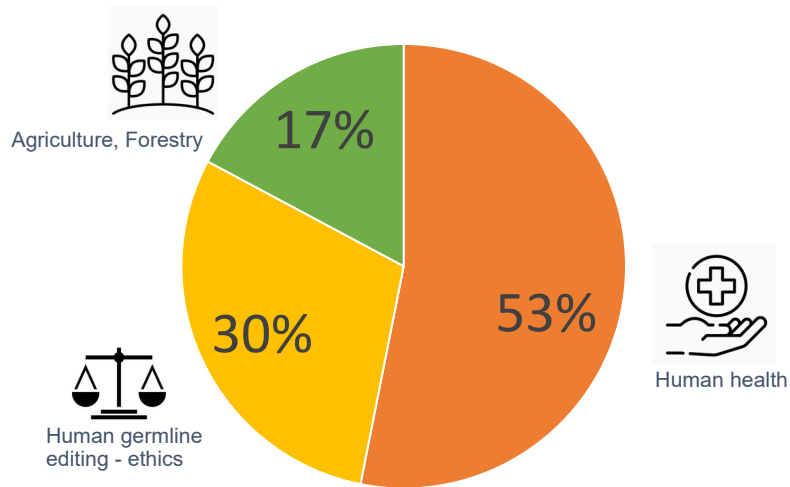
Scopus search terms: **plant + gene edit**

Table from Nature Genetics 54:364-367

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South African publications - gene editing



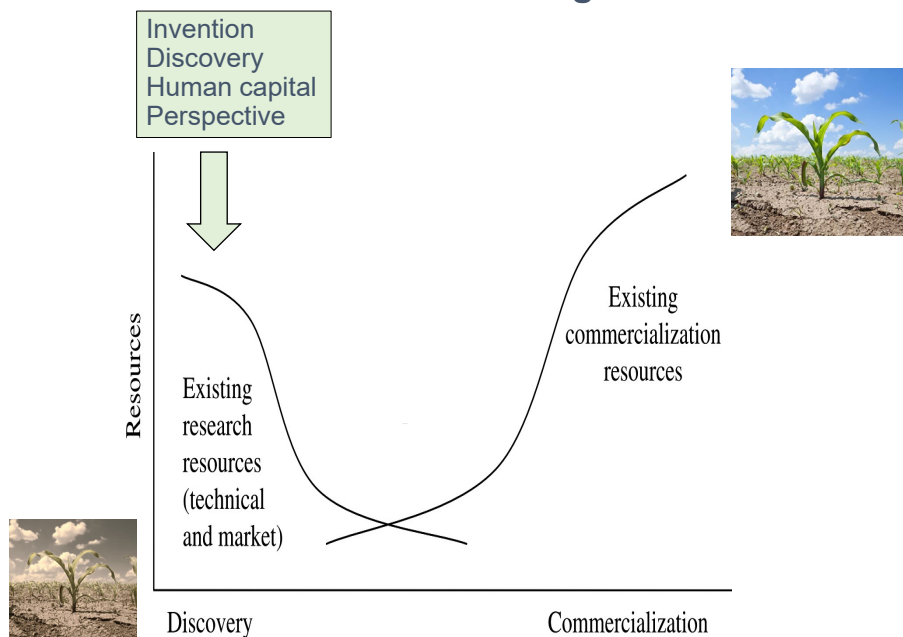
Total = 66 publications
39% of Health/Agric are Reviews.

Web of Science, Scopus search terms
Gene Edit*, Genome Edit*, Gene-Edit*, Genome-Edit*, CRISPR*

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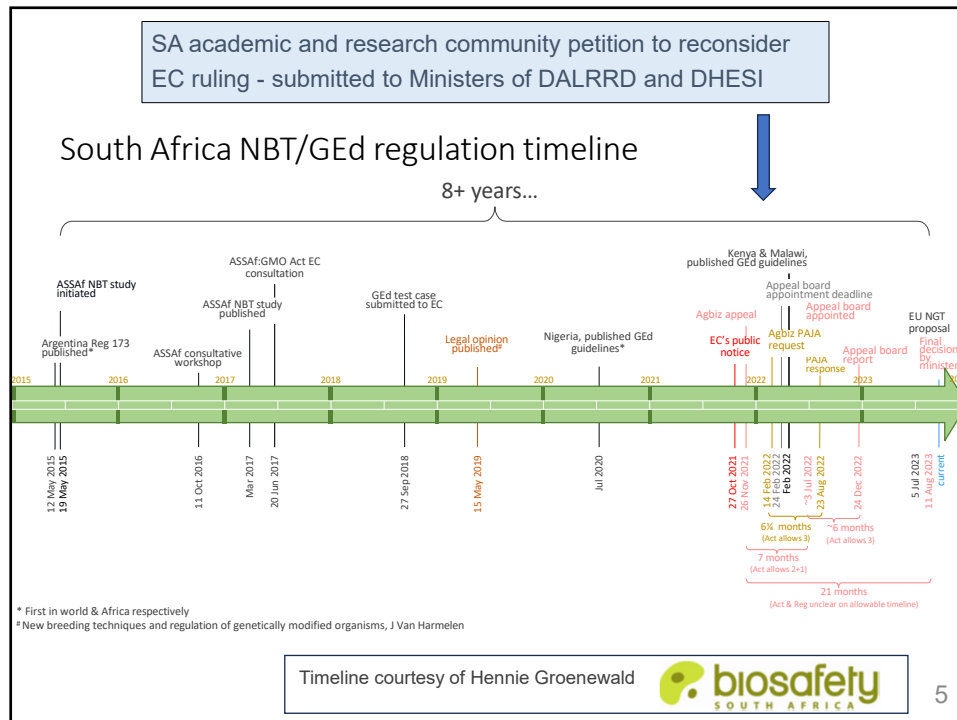
Role of Academia in Gene Editing Bio-Innovation



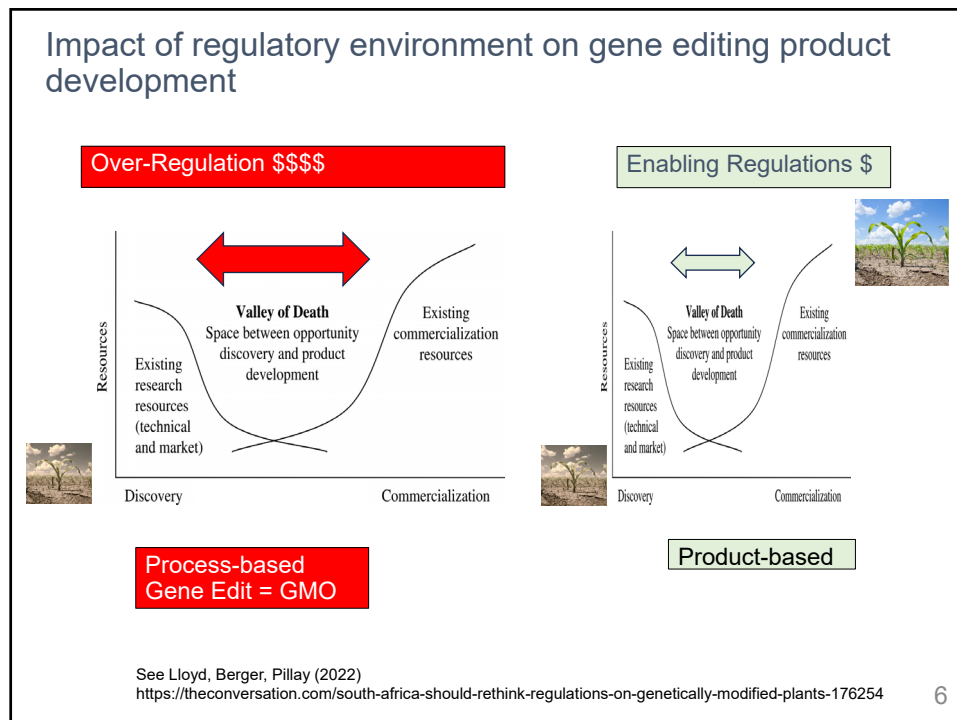
Adapted from Markham et al (2010). Journal Product Innovation Management, 27, pp. 402-417

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Innovation in Gene Editing in South Africa

What do SA Academic's need to do?

Build capacity

- Plant physiology
- Molecular biology
- Entrepreneurship e.g. UP Honours course “Biotechnology in the Workplace”

Establish critical mass in gene editing (e.g. centres of excellence)

Advocate for international best practices



What do SA Academic's need?

Research funding for invention and discovery

Enabling regulations for New Breeding Technologies-Gene Editing



Conducive environment for

- “Start-ups” in NBTs
- Public-private partnerships in NBTs

