



Bundessortenamt

Use of resistance characteristics in DUS in Germany

Swenja Tams, Bundessortenamt / October 22nd, 2024 / TC 60



Routine use of resistant characteristics

Pea

TG/7/10 Rev. 3

Lettuce

TG/13/11 Rev. 2 (2021)

Cucumber/Gherkin

TG/61/7 Rev. 3

French bean

TG/12/9 Rev. 2



Example : Lettuce

Varieties bred for open field cultivation

- Focus on general robustness instead of selection on specific resistances
- TQ information on response to specific pathogens: not tested
- Uniformity problems may occur

TG/13/11 Rev. 2, **Resistance to *Bremia lactucae*** (fungi)

- Race specific resistance
 - TG covers 15 races; currently testing of 2 (and 3 conditional) races
- Importance for cultivation under glass
- Complex variety-pathogen interaction leads to new races and resistances



Complex variety-pathogen interaction

	<u>TG adoption</u>	<u>Partial revision</u>
Lettuce	2017	2019, 2021, 2024
Pea	2009	2014, 2018, 2019, 2022
Pepper	2006 /2024	2015, 2018
Cucumber	2007	2014, 2015, 2016, 2019, 2023
Melon	2006	2014, 2019, 2024
Tomato	2011 / 2024	2013, 2018, 2019
Spinach	2007	2011, 2013, 2015, 2016, 2018, 2019, 2022, 2024



Regional or international relevance?

Importance and distribution of pathogens/races

Production systems (protected cultivation, open field, organic...)

Breeding programs

For which pathogens is worldwide harmonisation of methods needed?

Could regional or national TGs lead to more efficiency for revisions?



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Vielen Dank

Sorten schützen.

Sorten zulassen.

Vielfalt erhalten.

