

## **Pre-trials on seed viability at the University of Natural Resources and Life Sciences**

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In the Austrian lab (University of Natural Resources and Life Sciences, BOKU) pre-trials on the use of the TTC-test were performed for various common ragweed seed sources (Tab. 1). Problematic is the interpretation of intermediates (partly stained seeds) that could be integrated to the sum of viable seeds or not. The two types of calculating viable seeds differ between 5 to 51%. Consequently, the question of how to count "intermediates" is to be precisely defined at the beginning of any analyses where TTC-test is used.

Tab. 1: Results of the TTC-Test for seed lots from different populations and different degrees of cleaning (Rep = replicates)

Seed source	year	rep	N	Stained (alive)	Not stained (dead)	Intermediate	Viability-stained [%]	Viability (stained + interm) [%]	Viability-stained [%] mean	Viability (stained + interm.) [%] mean	Comment	date of TTC test
Hagenbrunn	2010		100	58	19	23	58	81	58	81	well cleaned	4.1.12
Hagenbrunn	2010		100	56	27	17	56	73	56	73	less cleaned	10.2.12
Hordorf	2011		100	71	17	12	71	83	71	83		5.1.12
Herbiseed	2011		100	85	11	4	85	89	85	89		5.1.12
Hungary	2010		100	92	3	5	92	97	92	97		5.1.12
Unterpurkla	2010		100	29	38	33	29	62	29	62	well cleaned	4.1.12
Unterpurkla	2010		100	27	54	19	27	46	27	46	less cleaned	10.2.12
Hagenbrunn	2010	1	25	20	1	4	80	96	82	97	well cleaned	27.7.12
Hagenbrunn	2010	2	25	21	1	3	84	96			well cleaned	27.7.12
Hagenbrunn	2010	3	25	20	0	5	80	100			well cleaned	27.7.12
Hagenbrunn	2010	4	25	21	1	3	84	96			well cleaned	27.7.12
Hagenbrunn	2010	1	25	11	13	1	44	48	41	53	less cleaned	6.8.12
Hagenbrunn	2010	2	25	6	15	4	24	40			less cleaned	6.8.12
Hagenbrunn	2010	3	25	14	8	3	56	68			less cleaned	6.8.12
Hagenbrunn	2010	4	25	10	11	4	40	56			less cleaned	6.8.12
Unterpurkla	2010	1	25	16	2	7	64	92	63	89	well cleaned	27.7.12
Unterpurkla	2010	2	25	16	2	7	64	92			well cleaned	27.7.12
Unterpurkla	2010	3	25	15	4	6	60	84			well cleaned	27.7.12
Unterpurkla	2010	4	25	16	3	6	64	88			well cleaned	27.7.12
Unterpurkla	2010	1	25	6	17	2	24	32	38	45	less cleaned	6.8.12
Unterpurkla	2010	2	25	8	16	1	32	36			less cleaned	6.8.12
Unterpurkla	2010	3	25	16	8	1	64	68			less cleaned	6.8.12
Unterpurkla	2010	4	25	8	14	3	32	44			less cleaned	6.8.12
Hordorf	2011	1	25	21	4	0	84	84	88	90		6.8.12
Hordorf	2011	2	25	24	0	1	96	100				6.8.12
Hordorf	2011	3	25	24	1	0	96	96				6.8.12
Hordorf	2011	4	25	19	5	1	76	80				6.8.12
Herbiseed	2011	1	25	25	0	0	100	100	92	96		6.8.12
Herbiseed	2011	2	25	22	1	2	88	96				6.8.12
Herbiseed	2011	3	25	22	2	1	88	92				6.8.12
Herbiseed	2011	4	25	23	1	1	92	96				6.8.12
Hungary	2010	1	25	25	0	0	100	100	95	96		6.8.12
Hungary	2010	2	25	24	0	1	96	100				6.8.12
Hungary	2010	3	25	23	2	0	92	92				6.8.12
Hungary	2010	4	25	23	2	0	92	92				6.8.12