

Intraspecific differences of seed longevity between ragweed populations in Hungary



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Common ragweed seeds were sampled in different years and various parts of Hungary, stored under dry conditions and at room temperature and finally tested in 2012 for viability by TTC-test. Viability of seeds decreased seriously within few years. After 8 years of storage under dry and warm conditions all seeds were dead.

After 7, 6 and 4 years of dry storage seed viability was 15, 45 and 72%, respectively. Common ragweed seed viability after 3 years of dry storage varied between 67 and 90%, depending on origin of populations.

In another study viability decreased by 82% after five years for seeds stored in paper bags at room temperature (Kazinczi et al. 2011; Kazinczi and Novák, 2014).

Viability variation between origins is relatively high (Table 1).

Table 1 : Viability (% viable seeds from standard TTC-test) of seeds of common ragweed at various age stages and collected from different parts of Hungary

Year of seed collection/ age of seeds	Origin	Viability (%)
1997/15	Keszthely, waste land	0
2004/8	Szekszárd, corn	0
2005/7	Keszthely, waste land	15
2006/6	Keszthely, corn	45
2008/4	Zalaegerszeg, corn	72
2009/3	Petrivente, waste land	78
2009/3	Petrivente, waste land	67
2009/3	Keszthely, waste land	67
2009/3	Keszthely, waste land	72
2009/3	Kaposvár, waste land	68
2009/3	Keszthely, roadside	77
2009/3	Kaposvár, stubble	90
2010/2	Kaposvár, waste land	64
2011/1	Kaposvár, waste land	97

References

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