



**Journal of Central European Agriculture, Volume 5 (2004) Number 4**

**THE EFFECT OF SEED SPROUTING DAMAGE ON FIELD EMERGENCE AND YIELD OF SPRING TRITICALE**

**Maria MOŚ, Tomasz WÓJTOWICZ**

Department of Plant Breeding and Seed Science, Agricultural University of Cracow, Poland,  
tel/fax: +48 12 633 36 06  
e-mail: [rrmos@cyf-kr.edu.pl](mailto:rrmos@cyf-kr.edu.pl)

Manuscript received: June 11, 2004; Reviewed: October 13, 2004; Accepted for publication: December 19, 2004

**ABSTRACT**

In the years 1999-2001 two-factor field experiments were carried out in which the effects of spring triticale seed sprouting damage on field emergence, elements of the structure of yield and the yield were investigated. The research covered three cultivars: Gabo, Migo and Wanad. The statistical analysis of the results showed significant effects of years and sprouting damage on field emergence in all the years. Consequently, these factors affected the number of spikes per unit area, weight of 1,000 seeds and the yield in the years which were unfavourable for emergence (1999, 2000). In those years the decrease in yield, in the case of seeds with the most severe sprouting damage, ranged from 29% to 65% as compared with the control. In the favourable year 2001, in spite of a significant effect of seed sprouting damage on field emergence, the emergence level was so high that no decrease in the investigated elements of the structure of yield and the yield was observed.

**KEY WORDS:** field emergence, Maguire's coefficient, sprouting damage, spring triticale, yield

[Back to contents](#) | [Full paper \(PDF file\)](#)

Copyright © 1999-2004 JCEA - Journal of Central European Agriculture (ISSN 1332-9049). All rights reserved. [Legal information](#).