

## **WONDER OF SPROUTING : CEREAL GRAIN**

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Pre-harvest germination (PHS) is the widespread phenomenon resulting in inferiority of grain, to decrease in its consumer qualities and respectively the prices. Areas to be most susceptible to PHS are located in Central and Northern Kazakhstan, the Ontario Province, Canada, Northern Australia, North-West of USA, UK icelands, Russian planes, and some others. In addition to the above-mentioned factors, the stability/instability of germination in the ear, there may be another factor - the hormone ABA quantity in caryopsis. ABA being an antagonist of GA, inhibits the synthesis of "germination  $\alpha$ -amylase" and contributes the seed storage in dormancy. In our studies it was shown that PHS-steady genotypes (like Lutescens 70) contain more ABA than those unstable (Novosibirsk 67). Thus, genetic relationships and multifactorial assessment of stability to germination in the ear has been made clear. Significance of the problem is confirmed by development of national and wider genetic programs aimed at understanding this phenomenon as the search for resistant genotypes.

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