

Some Morpho-Physiological and Quality Traits in Spring Wheat and Winter Triticale

Ionuț RACZ^{1),2)}, Marcel DUDA²⁾ Rozalia KADAR¹⁾, Vasile MOLDOVAN¹⁾, Ioan HAȘ^{1),2)}, Nicolae LUPU^{1),2)}

¹⁾Agricultural Research & Development Station Turda, Agriculturii street, 27, Turda, Cluj, e-mail :
racz_ionut@yahoo.com

²⁾University of Agricultural Sciences and Veterinary Medicine Cluj-Napoca, 3-4 Mănăstur

Keywords: spring wheat, winter Triticale, yield ability, quality traits.

SUMMARY

Romania, almost the entire territory meets the favorable conditions for winter wheat crop, but in recent years due to problems with crop establishment in autumn, is still remain a growing area that would be available for spring crops. Another consideration for the spring wheat area of land would earn would be that in our country there are mountain areas at high altitudes, with unfavorable conditions for winter wheat crop, where winters exceed 4-5 months yearly, or dry climates with harsh winters without snow cover. It is known that spring wheat yielded less than winter wheat, after our previous studies about 20-30% smaller production and it is due to the shorter period of vegetation, about 120 days, compared with winter wheat which has 265 days. Areas occupied by spring wheat in our country are small. The main variety grown is Pădureni (Rubin) and several varieties created at the Agricultural Research Station Szeged (Hungary). The results of morphological and physiological attributes and quality traits were obtained from a comparative culture which included 22 varieties of spring wheat. The level of production in spring wheat variety Pădureni usually can get 4 tons of wet gluten content of 32%, which makes it suitable for bakery industry (Timariu, 1972). In addition, this variety has a very good resistance to preharvest sprouting.

Winter triticale is, instead of it, an alternative for farmers, because they have a very high production potential which can reach 9.8 tons / ha in Titan variety (Ittu at all, 1999). Quality of triticale grain is good, because they have a high protein content, over 14% and in lysine over 3.5 g/100 g protein. The grains can be successfully used in bakery industry mixed: wheat flour / triticale flour in proportion 1:1. Growing areas for triticale are mainly on acid soils with lower fertility in the Carpathian hills of Transylvania, northwestern Romania, Moldova and Oltenia northern areas. The productions of Triticale are superior to the productions that could be obtained by cultivating wheat, barley or rye. Spring wheat and winter triticale interest to growers and therefore results recommend them for their further expansion.

REFERENCES

1. Ittu, Gh., Săulescu, N.N., Ittu Mariana, Mustățeș, P. (1999). Titan - primul soi intensiv de triticale românesc. Analele ICCPT Fundulea, vol.LXV.
2. Timariu, A. (1972). Contribuții la studiul estimării stabilității producției unor soiuri de grâu comun și grâu durum de primăvară. Probleme de genetică teoretică și aplicată. Vol. IV nr.6, p. 358-379.