

IDEGEN GÉN BEVITELE BÚZÁBA**¹MÉSZÁROS ATTILA, ²MIHÁLY RÓBERT, ²PAUK JÁNOS, ¹ALMÁSI KRISZTIÁN**

¹Szegedi Tudományegyetem Mezőgazdasági Kar,
6800 Hódmezővásárhely, Andrásy út 15.

²Gabonatermesztési Kutató Közhasznú Társaság,
6726 Szeged, Alsó Kikötő sor 9.
meszaros@mgk.u-szeged.hu

ABSTRACT – Foreign gene introduction into wheat

Wheat is one of the most valuable domesticated plants being the main cereal for human feeding. The efforts for wheat breeding are often constrained by the availability of only a limited gene pool for exploitation. The modern biotechnological approach of direct gene transfer promotes to increase of breeding efficiency by expanding the diversity of the existing gene pool. Protoplast transformation methods and bombardment of genes adsorbed on microparticles have proved to be the most successful in obtaining fertile transgenic plants from some monocotyledonous species especially the agronomically important cereals. Microprojectile bombardment was applied as the method of transformation to introduce the foreign gene aldose reductase (*Alr*) being responsible for decreasing the effect of abiotic stress drought. Target cells of transformation were calli derived from immature embryos. The phases of transformation were controlled by integration and expression of marker gene *bar*.

Kulcsszavak: búza, rezisztencia, abiotikus stressz, génbevitel, részecskebelövés

Keywords: wheat, resistance, abiotic stress, gene introduction, particle bombardment