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ASSESSMENT OF GROAT NUTRITIONAL ASPECT OF NEW DEVELOPED OAT HEXAPLOID LINES THROUGH INTERSPECIFIC CROSS WITH THE TETRAPLOID OAT *A. MURPHYI*

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ABSTRACT

Attempts have been made, to develop high groat protein content lines of hexaploid oat through hybridization work, aiming the transfer the tetraploid oat species A. murphyi's high groat protein content into three Moroccan common oat cultivars. Derivative hybrid lines were subjected to pedigree selection, which yielded ten lines showing a good agronomic performance. Since the derivative lines will be conceived for human consumption, selected lines were assessed for groat protein content. Protein analysis revealed that this trait was improved for the developed lines from 1 to 18% in comparison to their hexaploid parents, respectively.

KEYWORDS: Oats, Tetraploid Oat *A. Murphyi*, Common Oat *A. Sativa*, Hybridisation, Groat Protein Content