



Evaluation of the agronomic performances of the Kanz wheat variety (*Triticum* sp.) based on two sowing dates in Burkina Faso

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1 ABSTRACT

Wheat (*Triticum* sp.) is one of the major cereals grown worldwide and is an important source of human food. Wheat in Burkina Faso was formerly perceived as a cereal impossible to cultivate on a large scale in the Sahel. has become the symbol of the fight for food self-sufficiency. One of the limits to the promotion of the wheat in Burkina Faso is the lack of knowledge of the optimal sowing dates by producers according to the growing zones. The establishment of an agronomic trial program is an important step in identifying and popularizing these calendars in order to achieve this objective. In this context, an elite wheat variety (Kanz) was subjected to two sowing date modalities under field conditions. The study aims to determine the optimal sowing date to achieve maximum productivity and to understand how sowing dates affect agronomic traits. The characterization was made based on nine (9) quantitative characters following a Fisher block design with three repetitions. The combined analysis of the phenotypic variability observed in each trial revealed very significant differences between the two sowing dates in terms of the performance of the variety. It showed better performance in the test setup on date D1. There is a reduction in vegetative growth, the cycle, and production potential when transplanting is done late. The linear regression method made it possible to establish relationships between temperature and agromorphological characteristics (production potential and cycle). This study highlights the determining impact of the cropping calendar on wheat yield and provides scientific bases to optimize future research protocols.