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COMPETITIVENESS AND ECONOMIC RISKS OF CROP ROTATIONS WITH AND WITHOUT SUGAR BEETS WITH BIOGAS AS PRODUCTION TARGET UNDER CONSIDERATION OF THE INDIVIDUAL RISK ACCEPTANCE

Compétitivité et risques économiques de successions de cultures avec et sans betteraves sucrières avec l'objectif de production du biogaz compte tenu de la tolérance aux risques / Wettbewerbsfähigkeit und ökonomische Risiken von Fruchtfolgen mit und ohne Zuckerrüben mit dem Produktionsziel Biogas unter Berücksichtigung der individuellen Risikoeinstellung

ABSTRACT

The relative competitiveness of vegetable production methods is constantly changing due to the changing economic framework conditions, such as the development of new utilization possibilities for the products. Using a farm optimization model and taking into account the risk attitude of farm managers, the present study aims to answer the question of which economic effects the integration of sugar beets for biogas production has for single farms. To do so, the farm has to be considered as a dynamic system with maximum capacity limits or scarce production factors, such as soil, labor or capital. The results reveal that the integration of sugar beets in biogas production causes an increase in the average expected gross margin. At the same time, the income risk decreases measured at the standard deviation of the expected gross margin. The more risk averse a farm manager is, the greater is the advantage of the integration of sugar beets in the crop rotation of the farm for biogas production.
