

Abstract:

Due to the growing area under cultivation and the increasing volume of asparagus production the market competition in Germany has grown significantly. Therefore the producers are forced to use innovative technologies in order to reduce their costs and to improve their performance. Within the context of a project financed by the Federal Ministry of Consumer Protection, Food and Agriculture a calculation model has been developed in order to estimate on which basis it is possible to evaluate various technologies in the areas of harvesting, sorting and the whole production process from an economic perspective. The harvesting of the asparagus, which is very labour intensive, is a crucial starting point for reduction of costs by means of rationalisation. Calculations on partially mechanised harvesting aids prove that in the case of their high deployment ratio they can contribute to a significant reduction of costs. At present manual sorting represents the standard of asparagus grading methods. But calculations showed, that especially for bigger companies the introduction of fully automatic grading machines could be efficient. In general, an economically efficient production appears to be possible under the present circumstances; in relation to this an economic evaluation of production is very much recommended to the companies. In future further efforts towards a highly efficient production with reduced costs will be necessary.