

Abstract mulch film calculator

The Mulch film calculator is a calculation tool, based on Excel, which can be used to calculate effort and costs of mulch film usage in horticulture or agriculture. Furthermore, the costs and the required labour time by using biodegradable mulch film can be compared with those of plastic mulch film usage and / or with those of cultivation in uncovered soil.

For the calculation default average values or individual values can be used. In the summary the data for mulch film requirement and as well for the efforts of laying, removal and disposal will be analysed.

The mulch film calculator also offers the possibility to estimate a gross margin analysis for several horticultural crops where mulch film is used commonly (e. g. pickling cucumber or lettuce). The gross margin analysis can be executed for both the integrated and the organic cultivation variant. For these variants direct costs such as transplants/ha, related costs as for fertiliser, irrigation water and further on the variable costs as for labour and machinery are needed. Here it is possible to calculate with values from the database or with own specific ones.

Additionally the (positive) effects of mulch films compared to the cultivation in uncovered soil can be considered by estimating decreases or increases of several characteristics such as yield or the requirement of irrigation water.

Finally the mulch film calculator calculates the income and the necessary data for the gross margin.

All entered values and selected settings will be shown in graphical or tabular form and can be printed and saved in form of an Excel-file at the end of a session. Ending the program the entered values and selected settings will be saved and can be loaded in the next session.

For the comparison of different cultivation methods or different crops the mulch film calculator can be saved under different names.