

SoildiverAgro project

Adoption of new management practices to increase crop production and quality



THE WHAT AND WHY

Covering the soil in between cauliflower crops is a bad idea in dry summers

In a field trial on cauliflower, an intensive (rotating tillage, intensive fertilization, fallow in between cultivations) and an extensive cropping system (reduced tillage, extensive fertilization, cover crops in between cultivations) were compared and this within both a conventional and an organic cropping system. Two crops of cauliflower were planted consecutively in this trial, with 2.5 months between harvesting of the first crop and planting of the second crop. The intensive part of the trial remained fallow during this period. For the extensive part of the trial, it was decided to sow a cover crop (*Phacelia tanacetifolia*) during this period to introduce more organic matter into the

soil and stimulate soil life. However, in the dry summer of 2022, this cover crop between the two plantings further dehydrated the soil compared to the intensive cropping system. This was confirmed by soil samples. As a result, a poor initial growth of the second planting was observed and eventually a significantly lower yield. This while there was no difference in yield for the first planting between the intensive and extensive cropping system. In regard to soil humidity, the installation of a cover crop in after the main crop is more interesting, only install it before or in between the main crop(s) when circumstances are humid enough.



1. Planting of the first cauliflower crop on the organic field.



2. Second cauliflower crop on the organic field.



3. *Phacelia tanacetifolia* as a cover crop in between cauliflower crops.

KEYWORDS

Green manure, cauliflowers, extensive cropping system.

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