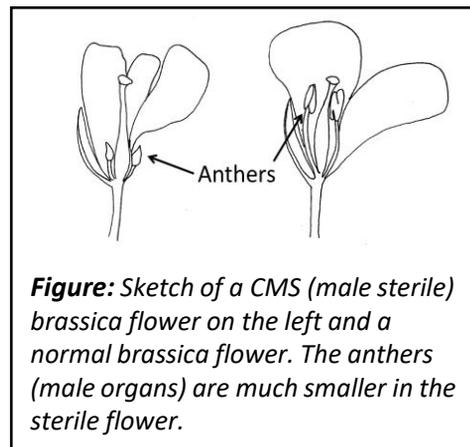


# The cell fusion-free vegetable list helps organic farmers to find suitable cultivars

## Problems

Many organic farmers want to cultivate vegetables free of artificial cell fusion. Cell fusion is technically interfering below the cell level and combines genetic information of different plant species. Therefore the technique is rejected for ethical reasons, because it does not comply with principles of organic farming, and has been banned by several private organic labels. Though, especially in Brassica vegetables and some chicory species, many cultivars on the market were produced this way. Therefore, farmers have difficulties to find out which cultivars are cell fusion-free, because the techniques are excluded from the GMO regulation and don't have to be labelled.



## Solutions

A consortium of FiBL, Bioland, Naturland, Bio Austria, Bio Suisse, Demeter and BNN **now published** a list of vegetable cell fusion free cultivars, suited for organic production for Central Europe. The list will be complemented with more cultivars, especially from the Mediterranean region.

## Practical recommendations

By **consulting** the list, farmers can find out if the varieties they want to plant are included or if there are suitable alternatives.

The list can be downloaded for **free in English, German, French, Spanish and Italian:**

<https://www.fibl.org/de/shop/1179-cf-free-varieties.html>

## Further information

- **FiBL breeding manual** <https://www.fibl.org/fileadmin/documents/shop/1202-plant-breeding.pdf>
- **IFOAM-strategy on artificial CMS**  
[https://www.ifoam.bio/sites/default/files/cell\\_fusion\\_replacement\\_strategy\\_2017\\_for\\_website\\_upload.pdf](https://www.ifoam.bio/sites/default/files/cell_fusion_replacement_strategy_2017_for_website_upload.pdf)
- **IFOAM position paper: Compatibility of Breeding Techniques in Organic Systems**  
[https://www.ifoam.bio/sites/default/files/position\\_paper\\_v01\\_web\\_0.pdf](https://www.ifoam.bio/sites/default/files/position_paper_v01_web_0.pdf)

**Authors:** Thomas Kimmel, BNN; Martin Koller FiBL; Johanna Zellfelder, BNN;

**Contact:** [zellfelder@n-bnn.de](mailto:zellfelder@n-bnn.de)

**Publisher:** ÖMKi Hungarian Research Institute of Organic Agriculture

**Date:** July 2019

**LIVESEED:** Boosting organic seed and plant breeding across Europe. LIVESEED is based on the concept that cultivars adapted to organic systems are key for realising the full potential of organic agriculture in Europe. Research project 2017-2021.

**Social Media:** Facebook [[LIVESEED](#)] & Twitter [[@LIVESEEDeu](#)]

