

Crop Rotation in Organic Production

ORGANIC CERTIFICATION FACT SHEET

Crop rotation is an essential component of the USDA organic regulations. Both annual and perennial crop producers must incorporate practices that meet the four functions of the crop rotation standard - §205.205.

7CFR §205.2 Crop rotation The practice of alternating the annual crops grown on a specific field in a planned pattern or sequence in successive crop years so that crops of the same species or family are not grown repeatedly without interruption on the same field. Perennial cropping systems employ means such as alley cropping, intercropping, and hedgerows to introduce biological diversity in lieu of crop rotation.

Specific crop rotations are not defined in the USDA organic regulations. This provides flexibility for you to determine the best practices for your farm. Site-specific conditions including climate, hydrology, soil, and crops being produced each play a role in determining your crop rotation plan.

Crop rotation includes, but is not limited to sod, cover crops, green manure crops, and catch crops that:

Maintain or improve so	il quality & organic matter
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Manage crop nutrients and soil fertility

Prevent crop pests, weeds, and diseases

Provide erosion control

The four functions of crop rotation

Annual crop producers may meet the four functions of crop rotation by interrupting repeated plantings of one crop family. This can be accomplished by planting your site with a different species of crop post-harvest, or by planting a soil-building cover crop between plantings.

Perennial crop systems may meet the four functions of crop rotation through different methods. The crop rotation requirement may be met through practices that increase biodiversity such as the planting of alley crops, intercropping with other crops, and/or hedgerows.

Pasture production sites are exempt from the crop rotation standard.

Contact our office to discuss your crop rotation plan and to assess its consistency with the requirements of USDA organic regulations.

Annual cropping system definitions

Crop - Pastures, cover crops, green manure crops, catch crops, or any plant or part of a plant intended to be marketed as an agricultural product, fed to livestock, or used in the field to manage nutrients and soil fertility (§205.2).

Crop year - The normal growing season for a crop as determined by USDA (§205.2).

Repeatedly - Grown in more than two consecutive crop years.

Interruption - Planting a crop or cover crop from a different species or family.

Perennial cropping system definitions

Alley Cropping – Trees or shrubs inter-planted with agronomical or horticultural crops

Biological diversity - The degree of variation of life forms within a given ecosystem (e.g. farm or production site).

Intercropping – The practice of simultaneously cultivating two or more crops in the same production area.

Hedgerows – Dense vegetation established in a linear design to achieve conservation.

Additional Resources

Organic Production: Using NRCS Practice Standards to Support Organic Growers https://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb1043184.pdf

ATTRA Tipsheet: Crop Rotation in Organic Farming Systems

https://attra.ncat.org/attra-pub-summaries/?pub=521

