Diversified crop rotation

Practice of cultivation where different types of crops are planted in the same field alternately.

Well planned crop rotation can improve soil structure and fertility. The key is to alternate between plants with deep and shallow roots.

The main objectives in crop rotations are preventing the injurious effects of monoculture which are decline of soil structure and soil fertility and increase of weeds, diseases and pests.

Crop rotation can help reduce sheet erosion and increase water infiltration. It also have many other benefits such as reducing the need of nitrogen fertilizer.

Application

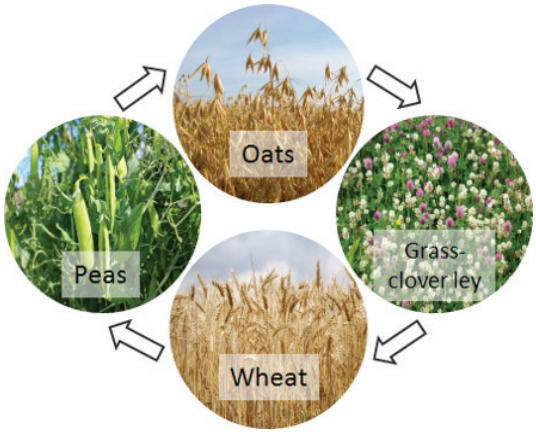
Crop rotation can be used in any conditions. However it is essential to plan the rotation carefully. It is important to know what is the most beneficial order to cultivate crops, which species to choose and how often they can be cultivated. Needed years for one species is normally 1-4 years but some crops may need 3-4 years.[2)]

Maintenance

- Monitoring and changing the crops used if needed

Economics

- There can be decrease in income because of the value from harvested crop
- However the crop rotation can be planned to be versitale and have only species that are benefitial to the farmer



Example of crop rotation cycle in Southern Finland.
Illustration: Heidi Nurminen, TUAS

Further information:
Greentumble - Benefits of crop rotation

Sources: 1) Individual NWRM crop rotation. Searched 12.3.2018. (Link)
2) Rajala J. 2006. Luonnonmukainen maatalous, Helsingin yliopiston Maaseudun tutkimus- ja koulutuskeskus (FI). (Link)

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