

## Regular application of organic substances

<b>Goal</b>	<p>Increase the edaphic fauna and microbial functional diversity.</p>
<b>Short description of the measure</b>	<p>Organic fertilizers are all kind of substances such as manures, compost and other organic waste that are usually recycled from other farm or processing activities. Organic manures contain N-rich materials which are slow releasing under the action of soil microorganisms and which can significantly raise soil fertility in the medium and long term.</p> <div data-bbox="641 622 1147 1003" data-label="Image">  </div> <p><b>Pic. 1: Extensive livestock in an agro-forestry system, this measure increases the quality of soil properties, both biological and chemical-physical.</b></p>
<b>Quality elements of soundly implemented biodiversity measures</b>	<p>The pollution potential of organic fertilizer is similar to any nutrient containing fertilizer and must be controlled through proper management techniques, such as restrained application rates and times.</p>
<b>Effects on biodiversity</b> (ecosystems, species, soil biodiversity)	<div data-bbox="411 1406 507 1534" data-label="Image">  </div> <p><b>Edaphic fauna and microbiobiodiversity:</b> Increasing soil organic matter levels leads to less compaction and salinization; soil faunal activity increases leading to structural improvement in the soil. This will ultimately avoid economic losses and related social consequences (Nawaz, 2013).</p>
<b>Other positive effects/benefit for the farmer</b>	<p>The addition of animal wastes has beneficial effects on soil pH, soil structure, resistance to erosion, soil temperature, organic matter content of soil, water infiltration and soil water retention and increase microbial biomass and soil enzyme. organic matter in soils is a major source of nitrogen. It is the result of a long-term process in which the soil biota, under appropriate conditions, breaks down organic materials for converting them into a stable material called humus. Humus shall not be considered only a nitrogen source; it helps to retain nutrients in the long-term, to store water, to better structure and oxygenate the soil, to buffer it from temperature changes and to prevent soil-borne diseases.</p>
<b>Indicator/key data</b>	<ul style="list-style-type: none"> <li>▪ Units per hectare/ tonne of N from organic fertilizer.</li> <li>▪ % of organic fertilizer / Total fertilizers application.</li> <li>▪ Frequency of organic applications.</li> </ul>

## Reference

- The impact of agricultural practices on biodiversity Alison McLaughlin a, Pierre Mineau b,\* 'Sagittaria Ecological Services, /-/43 Rue Laurier, Hull, Que. JBX 3W4, Canada"National Wildlife Research Centre, Canadian Wildli-fe Service, JOO Blvd. Gamelin, Hull, Que. KIA 0H3, Canad ELSEVIER Agri-culture. Ecosystems and Environment 55 ( 1995) 201-212
- The importance of soil organic matter. Key to drought-resistant soil and sustained food production (2005) FAO.

## Further information: [Knowledge Pool](#)

This Action Fact Sheet belongs to the training package for managers of standard organisations and companies and was developed within the project LIFE Food & Biodiversity (Biodiversity in Standards and Labels of for the Food Industry). The main objective of the project is to improve the biodiversity performance of standards and sourcing requirements in the food industry by helping standard organisations to integrate efficient biodiversity criteria into their schemes and motivating food processing companies and retailers to include comprehensive biodiversity criteria into their sourcing guidelines.

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