Pelletized legume plants as fertilizer for vegetables in organic farming

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Introduction

According to current rules, organic agriculture is based on natural and organic fertilizers mainly. Organic fertilizers are applied as a basic nutrient source (preplant use) but also as a supplementary feeding to provide ready available nutrients, especially nitrogen. Legume plants are traditionally rich in N and can be use as fertilizer in organic production. The objective of this study was to assess the influence of organic fertilizer produced from dry biomass of red clover on the yield and quality of celeriac.

Materials and Methods

Field experiments were conducted with celeriac cv. Diamant, planted at a density of 80 000 plants per hectare. Before planting compost at 25 tons per hectare was applied. Pelletized organic fertilizer produced from red clover meal (Ecofert) was applied in doses equivalent to 120, 180 and 240 kg of nitrogen per hectare.
The following five experimental treatments were assessed in the research:

1. Control treatment
2. Mineral fertilization of 100 kg N/hectare
3. Organic fertilizer (Ekofert K) – 120 kg N/hectare
4. Organic fertilizer (Ekofert K) – 180 kg N/hectare
5. Organic fertilizer (Ekofert K) – 240 kg N/hectare

**Results**

Effect of Ekofert on biomass and yield of celeriac

Nitrogen content in soil horizon 60-90 cm after harvest