

## EIP-AGRI practice abstract

### Short title:

Digestate from the co-digestion of vegetable oils waste and pig manure by "VALUVOIL" process

### Summary:

The digestate is a solid-liquid by-product obtained from the co-digestion (anaerobic digestion) of pig manure and residues from the pretreatment process (RPP) and by-products from the refining process (BRP) of the vegetable oils.

It can benefit with the diversification of market by new environmental friendly bio-product, increased soil microbial biomass size and activity were increased under application of digestate, greater efficiency and reduced costs of managing livestock waste.

The general appearance of the product is powder or little solid particles with a NPK rate of 0.09-0.2-0. The composition of the digestate depends on the characteristics of the waste used for anaerobic digestion ([N<sub>total</sub>]=600-900 mg/L, [TP]=75-240 mg/L). Digestated showed a stimulant effect on plant growth, with higher yields of barley and ryegrass in treated soils than in the control soil when digestates were applied at appropriate rate.

The digestates generated in the AD process, were tested in germination and microcosm experiments to determine their biofertilizer and biostimulant effects on plants and soils. The metals are below the limits of its classification.

The conditions of application should be similar to traditional synthetic fertilizers in liquid form. In conventional farming it is recommended permanent grasslands, cereals for the production of grain, root crops and plants harvested green from arable land by area with a dosage of 80-40 m<sup>3</sup>/ha.

For more information: [https://nutriman.net/farmer-platform/product/id\\_268](https://nutriman.net/farmer-platform/product/id_268)