

Natural stone meal replaces the use of artificial manure

ARCADIS works on the introduction of the use of stone meal instead of artificial manure in the Dutch agriculture. Stone meal is comparable to volcanic ashes or as mud such as found on a tideland or in a streambed.

Biological farmers who are not allowed to use any artificial manure will be most benefiting from the use of stone meal.

At the moment there is a research going on where various pieces of agricultural land were fertilized with different amounts of stone meal. At the end of this experiment the optimum amount of stone meal to be used should be known.

Stone meal is used to keep the optimum mineral combination in the ground and to keep the mineral cycle going after cows take the minerals out of the ground to “put” in their milk production. The manure is not put back in the ground, so the ground should get low on minerals. To keep the minerals available for the kettle to eat, minerals should be put back in the ground. Stone meal will be used in combination with the kettle manure.

There are 4 benefits of the use of stone meal compared to artificial manure:

- It needs less energy to be produced: mining and grinding need less energy than chemical production of artificial manure*
- It is more effective: the stone meal won't be flushed away by rain like artificial manure will. In the case of rain after fertilizing the artificial manure will be flushed out of the ground, where as the heavier stone meal has a better attachment and will stay in the earth where it is needed.*
- Stone meal binds CO₂, where as manure usually produces CO₂.*
- In the earth stone meal is a slow reagent and therefore will not produce any GHG. This au contrary to artificial manure, which is a very quick reagent and therefore creates the GHGs CO₂ and N₂O.*

Stone meal is better to keep the agricultural land optimized. The food is better, the cows are in better condition, the milk is better, so all of this is better for the consumer.