

## REDUCE P-APPLICATION BASED ON SOIL P STATUS

first DRAFT

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### *Description*

In some countries or regions, especially with high inputs of animal manures, the total and available P in soils is high to very high which can be lost by run-off, erosion and/or leaching to the environment. A reduction of P-application can reduce these losses.

### *Rationale, mechanism of action*

Too high phosphorus concentrations in surface waters lead to eutrophication. These high P-concentrations are at least partly due to losses from agricultural practices. P-inputs lower than the offtake by the crop will gradually decrease the P-concentration in the soil and as a consequence the P-concentration in surface waters in the long run.

### *Applicability*

Knowledge of the mean P status of the soil in a certain region is necessary. If this is the case and the P status is high to very high, a reduction of P-applications can be advised. Farmers who think that certain fields have a lower P status can prove this with a soil analysis. It is a very simple measure and there is no need for technical equipment.

### *Effectiveness, including certainty*

The measure will be effective at least in the long run. By diminishing the P-status it is not excluded that so called "retrograded P" will become more available and will further delay the effectiveness of the action.

### *Time frame*

Depending on the height of the P status and the still allowed P-application, it can take several decades before real changes in losses will occur.

### *Environmental side-effect/ pollution swapping*

No problems are expected.

### *Relevance, potential for targeting, administrative handling, control*

Relevant for all fields above the optimum. Target values must be available which will be different depending on the extraction procedure. Farmers have to fill out a document indicating the total P-application. Control on the field will be only possible after several years.

### *Costs: investment, labor and acceptance by farmers*

Except some administrative load no further investment and labor costs. The acceptance by life stock farmers can be hard because this will limit to a great extent the application of animal manure on their fields. As a consequence more animal manure has to be treated with supplementary costs.