

Name:

Phosphorous productivity.

Definition:

Phosphorous productivity represents the kg of crop yield per kg of P (P₂O₅ form) applied.

Calculation method:

This indicator is calculated by estimating the sum of phosphorous productivity in each of the plots / crops.

$$\text{Indicator} = \frac{\sum_i (PP_i \times A_i)}{A_T}$$

Where:

Indicator: Total phosphorous productivity (kg crop yield per kg fertilizer P)

PP_i: The phosphorous productivity of crop *i*

A_i: Area for the crop *i* (ha)

A_T: Total area considered (ha)

The phosphorous productivity of each of the crops is estimated as the division between harvested productions and phosphorous applied with fertilization.

Interpretation:

Greater phosphorous productivity means better use of fertilizers by the crop.

Information source:

Crop area, applied inputs and yields of the different crops are taken from the survey.

The values of extractions of phosphorous by the crops are taken from the attached bibliography.

Bibliography and references:

IRENA 18 – Gross nitrogen balance. OECD / Eurostat Nitrogen handbooks (2007)

Ministerio de Medio Ambiente y Medio Rural y Marino (2010). Guía práctica de la fertilización racional de los cultivos en España.

Ministerio de Agricultura, Alimentación y Medio Ambiente (2015). Balance del fósforo en la agricultura española, año 2013. Metodología y resultados.