ESPP input to EU Soil Health Directive proposal
1 November 2023


ESPP welcomes that Europe should establish a soil policy and that the proposal recognises nutrients (phosphorus, nitrogen) as key criteria for healthy soil.

Soil nutrient availability is essential for plant health, crop productivity and food production, but too high levels can result in losses to surface and ground water. Soil nutrient losses are one of the most widespread reasons for eutrophication problems and for failure to achieve Water Framework Directive obligations. Climate change will accentuate nutrient pressures on soil health (mineralisation, erosion, both leading to nutrient losses, but also to higher crop nutrient needs).

ESPP therefore welcomes the alignment with the Water Framework Directive specified in art. 10 and Annex IV(5). ESPP regrets that there is no provision for local governance to involve civil society and stakeholders in “soil districts”, in particular engagement with the water basin governance of the Water Framework Directive.

ESPP regrets that, whereas the WFD fixes legal obligations to reach quality status objectives by specified dates, this proposed Directive fixes only a “monitoring framework” and a 2050 “objective” (art. 1).

ESPP welcomes that phosphorus and soil nitrogen are specified as two of the eleven soil health criteria.

ESPP supports the proposal (Annex I) that, for the whole EU, soils must have a maximum P value set by Member States (MS), such that this maximum is between 30 and 50 mg/kg (Olsen P). ESPP regrets that it is unclear whether definition of maximum nitrogen levels is optional for MS, or whether it is obligatory only if nitrogen is causing “critical loss of ecosystem services”. ESPP suggests that “critical loss …” should be specified to cover at least all Nitrate Vulnerable Zones and any catchment at risk of non-achievement of Water Framework Directive or groundwater quality requirements.

ESPP supports Annex II proposals to measure P and N as Olsen-P and total N (Kjeldahl N). These methods are imperfect, but are recognised, widely available, comparable. However, use of other methods should be authorised if scientifically justified for a given soil district/type and subject to benchmarking against these methods.

ESPP notes that it is P losses which cause eutrophication, not soil P levels. Annex III (Sustainable Soil Management Principles) should refer to Nutrient Use Efficiency and require field nutrient balances using the CAP FaST tool.

ESPP welcomes the recognition of appropriate fertilisation, nutrient recycling and organic fertilisers in Sustainable Soil Management Principles Annex III(e): “when fertilization is applied, ensure adaptation to the needs of the plant and trees … and prioritise circular solutions that enrich the organic content”.

ESPP suggests that healthy soil criteria should also include, for crop and grazing land, MINIMUM plant-available phosphorus levels, defined by region / soil / crop types and taking into account biodiversity and water quality objectives. Without adequate phosphorus supply, plant health and crop productivity are compromised. This reflects the EU Farm-to-Fork and Biodiversity Strategy target to “reduce nutrient losses by at least -50% without deteriorating soil fertility”.

The European Sustainable Phosphorus Platform (ESPP) is a not-for-profit association (ASBL) registered in Brussels, Belgium
ASBL n° 0568.830.863 - EU VAT n° BE0568830863 - DUNS 370713986 - EU Transparency Register n° 260483415852-40