



**IFOAM Organics Europe's
recommendations on the
Sustainable Use of Pesticides
Regulation (SUR)**

January 2023

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Introduction

IFOAM Organics Europe welcomes the European Commission's proposal on the revision of the Sustainable Use of Pesticides Regulation (SUR)¹, as it can **be a key instrument to reduce the impact of pesticides on human and animal health as well as on the environment, and to meet the Farm to Fork Strategy's objectives**, especially to reach its **targets on pesticide reduction**:

- **Reducing the overall use and risk of chemical pesticides by 50% by 2030,**
- **Reducing the use of more hazardous pesticides by 50% by 2030.**

As organic farming refrains from using chemically synthesised pesticides² (among which herbicides account for around 50%) and relies firstly on preventive and indirect measures such as longer crop rotation and plant diversification, completed when needed with the use of naturally occurring substances³ to manage pest, organic agriculture contributes to achieving the SUR's objectives and should be properly promoted. In this regard, the SUR can also be a tool to fulfil the 25% target of organic farmland by 2030 across Europe set under the Farm to Fork Strategy.

However, IFOAM Organics Europe considers that the SUR proposal published by the Commission on 22 June 2022 should be improved on several points to achieve and measure the progress on the objectives set.

First, the SUR needs to set **clearer and more detailed definitions** of plant protection products and methods to reduce pesticide use (as mentioned under recommendations No 1 and 2).

Moreover, it is crucial to modify **the calculation method** of the **Harmonized Risk Indicator (HRI)-1 which is unfit** to properly assess the pesticide use and risk reductions, and, as a volume-based indicator, discriminates against natural substances used in organic farming (cf. our recommendation No 3).

Furthermore, to ensure food production while preserving biodiversity, it is important to promote organic farming in certain sensitive areas on agriculture land (defined in Article 3(16) of the proposal) and to enable the use of natural substances authorized in the EU Organic Regulation 2018/848 in these areas, which cover large agricultural areas in some countries (cf. our recommendation No 4).

Besides, it should not be forgotten that the current Sustainable Use of Pesticides Directive (SUD)'s very poor implementation to reduce the pesticide use in the last decade is mainly due to a lack of implementation by Member States. Thus, the SUR should also consider means to ensure **adequate implementation by Member States** (cf. our recommendation No 5, 6 and 7) and **adequate budget for organic farming in the Common Agricultural Policy's National Strategic Plans** which are the main funding tools to implement farming practices aiming at reducing the use of pesticide (cf. our recommendations No 5 and 7).

Finally, it is crucial **to increase the availability of alternatives to chemically synthesised pesticides** with a dedicated registration process for naturally occurring substances (cf. our recommendation No 8).

¹ Proposal for a Regulation of the European Parliament and of the Council on the sustainable use of plant protection products and amending Regulation (EU) 2021/2115. URL: <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=COM:2022:305:FIN>

² 'Chemically synthesised pesticides or substances' is the term used in the Regulation (EU) 2018/848 of the European Parliament and of the Council of 30 May 2018 on organic production and labelling of organic products and repealing Council Regulation (EC) No 834/2007. URL: [EUR-Lex - 32018R0848 - EN - EUR-Lex \(europa.eu\)](https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32018R0848-EN)

³ 'Naturally occurring substances' is the term used in the Regulation (EU) 2018/848 op-cited.

Recommendation No 1: Differentiating chemically synthesised products from naturally occurring substances

Plant protection in organic farming follows the principle of prevention and strengthening plant health. It relies on preventive and indirect measures such as longer crop rotation and plant diversification, completed when needed with the use of naturally occurring substances to manage pest and diseases.

Conversion to organic farming entails a transformation of the entire agroecosystem and minimising external inputs, it is not only a substitution of inputs to a less harmful plant health care regime.⁴

No chemically synthesised pesticides and no herbicides are allowed in organic farming. And, **in general, on 90% of organic land not even naturally occurring substances are used,** as they are only needed to produce specialty crops such as wine and horticulture.

In conventional agriculture, 232 chemically synthesized pesticide active substances are currently approved, which are synthesized to a large extent from the derivatives of petroleum chemistry.

This contrasts with the 57 naturally occurring active substances currently approved for use in organic agriculture according to the EU Organic Regulation (EC) 848/2018.

Out of these 57 naturally occurring substances, 27 of them are of plant origin. These are essential oils and other plant products with fungicidal, insecticidal, or deterrent effects.

17 naturally occurring active substances are of inorganic origin. These include minerals, salts, and elementary substances such as the copper- and sulphur-based active substances, sulphur lime, potassium hydrogen carbonate (also known as baking powder), which are important fungicides for organic agriculture. It also includes ordinary quartz sand.

The remaining 13 active substances authorized in organic farming are composed of substances of animal (e.g., sheep fat as a repellent) or microbiological origin (e.g., laminarin from brown algae, cerevisans from yeasts to stimulate the plant immune system), fermentation products (vinegar used against bacterial and fungal diseases, beer), paraffin oils and amino acids.

In addition to these, microorganisms (excluding genetically modified organisms (GMOs)) as well as pheromones and semiochemicals can be used in organic production.

The most fundamental difference between chemically synthesized and naturally occurring substances may be that the latter have been both drivers and products of evolutionary selection processes over millions of years and still are.

Regardless of their individual toxicity, a characteristic of all plant, animal or microbial substances is that their breakdown and degradation has formed the basis for energy production and material cycles in all ecosystems for millions of years. Consequently, **naturally occurring substances are usually degraded much faster than synthesised substances from the chemical laboratory.** Their residence time in the ecosystem -and thus the time during which they can have a toxic effect - is thus shorter than that of most chemically synthesised pesticides.

With certain limitations, this also applies to natural pesticide active substances of mineral origin. They, too, are involved in biogeochemical cycles and are subject to chemical transformations and weathering processes during

⁴ IFOAM Organics Europe, *Plant Health Care in Organic Farming - The role of natural substances in a biodiversity-based system approach*, November 2020. URL: https://www.organicseurope.bio/content/uploads/2021/11/HeartsMinds_IFOAM_PPP_leaflet_final_202104.pdf?dd

which their biological activity decreases. In addition, all biocompatible mineral active substances are known essential nutrients or micronutrients for plants.

➤ **Clear definitions of chemical plant protection products and chemical active substances are needed**

The Farm to Fork Strategy's refers to 'chemical plant protection products', that are defined in the strategy only in opposition to 'biological' active substances. Clearer definitions of 'chemical plant protection products' set under the SUR's Article 3(1)⁵ and 'chemical active substance' set under Article 3(3)⁶ are necessary.

Indeed, **the term "chemical plant protection products" is broad and includes very different products, from "chemicals" with a natural background** and which are also used in everyday life such as sodium bicarbonate (baking powder) or fatty acids (i.e.. soap), **to synthetic substances with a high toxicity** such as neonicotinoids. To give a complete picture of the products used in plant protection, the SUR should clearly differentiate chemically synthesised (or exogenous) products from naturally occurring substances.

- **Chemically synthesised products:** plant protection products containing active substances, which cannot be found in nature, but which were created through human endeavour and are a new introduction into ecosystems. The vast majority of synthetic active substances of pesticides are synthesised from the derivatives of petroleum chemistry and only few are human-made inorganic compounds, like aluminium phosphide or magnesium phosphide.
- **Naturally occurring substances:** substances and mixture of substances which already exist in nature independently from human activities. These include inorganic substances such as mineral compounds, salts, metals, and non-metals, as well as substances of plant, animal, or microbial origin, semiochemicals (e.g., pheromones) and microorganisms.

The definition of 'chemical plant protection product' should exclude from the scope substances of animal or mineral origin, in addition to the other exclusions.

The definition in Article 3(3) should be changed to be in line with the definition in Article 3(1) to make the Regulation more coherent and understandable. We suggest excluding from the scope of chemical active substance, the active substances of natural origin or substances identical to them such as substances of animal or mineral origin and invertebrate macro-organisms, in addition to the other exclusions.

A clear differentiation between chemically synthesised and naturally occurring substances would also contribute to a harmonisation of EU law, as the organic regulation (Reg. EU 2018/848) already differentiates exactly between these categories of pesticides. Mirroring this definition would also mean that the ambitions within the SUR to uphold and work towards the EU's 25% organic goal would be clearer and more consistent.

➤ **Biocontrol and organic farming**

Whereas organic farming uses natural substances which are considered as biocontrol according to the SUR definition, **other natural substances allowed in organic farming would not be part of biocontrol according to the definition proposed by the Commission.**

Indeed, the SUR proposal establishes a definition of biological control in the Article 3(23)⁷, which includes all natural substances allowed in organic farming according to the EU legislation, except inorganic compounds (mineral compounds such as copper, sulphur, potassium bicarbonate). The definition of biocontrol in the SUR should be aligned with the EU Regulation on organic farming and should include inorganic compounds of

⁵ 'chemical plant protection product' means a plant protection product containing a chemical active substance excluding plant products using natural means of biological origin or substances identical to them, such as micro-organisms, semiochemicals, extracts from plant products as defined in Article 3(6) of Regulation (EC) No 1107/2009, or invertebrate macro-organisms'.

⁶ 'chemical active substance' means an active substance other than a micro-organism, a semiochemical or an extract from a plant product as defined in Article 3(6) of Regulation (EC) No 1107/2009;

⁷ "biological control" means the control of organisms harmful to plants or plant products using natural means of biological origin or substances identical to them, such as micro-organisms, semiochemicals, extracts from plant products as defined in Article 3(6) of Regulation (EC) No 1107/2009, or invertebrate macro-organisms'.

mineral origin. This would also be in line with national definitions of biocontrol. For example, the French legislation defines biocontrol as four categories: **microbials, invertebrate biocontrol agents, semiochemicals and natural substances.**

Recommendation No 2: Differentiating Integrated Pest Management (IPM) from organic agriculture

In the current SUD, **both organic agriculture and IPM are defined as low pesticide-input pest management.** Further details should be included in the SUR to make clearer the difference between the two approaches:

- **IPM** is based on an integrated approach where sustainable non-chemical methods are prioritised before chemical methods. Pesticides (mostly chemically synthesised pesticides) can be used if non-chemical methods do not provide satisfactory pest control.
- **Organic agriculture** is based on a system approach where plant health is managed mainly by preventive and indirect measures internal to the agroecosystem, with the aim of being as independent as possible of external inputs (even those naturally occurring). Only inputs based on natural substances are authorised and the use of chemically synthesised substances is prohibited. The use of herbicides is prohibited as well. This leads to a situation in which the overwhelming majority of organic crops and areas require no treatment with plant protection products.

Thus, IFOAM Organics Europe suggests **adding a definition of organic farming** after the definition of IPM under Article 3(15).

Recommendation No 3: Using a hectare application rate calculation method -such as the NODU- for an enhanced Harmonised Risk Indicator (HRI) to properly measure the pesticide use and risk reductions

What are the issues with the calculation method of the HRI-1 proposed by the Commission?

The current **Harmonised Risk Indicator (HRI) 1**, elaborated by the Commission and Member States under the current SUD and adopted in 2019, gives only a partial picture of the evolution of risks related to the use of pesticides, because it **does not consider how, where and when the pesticides are used** – as this information is not available to the Commission. HRI-1 is of great concern to the European organic movement and civil society as it seriously undermines the ambition and credibility of pesticides use and risk reduction efforts, including the most hazardous ones. As a quantity-based indicator, the HRI-1 gives the wrong impression that organic farming is the main problem, as when doing calculation, it overestimates the risks of naturally occurring substances, and underestimates the risks of chemically synthesised pesticides.

Indeed, the HRI-1's calculation method, which Member States adopted in 2019 to measure the use and risks of pesticides, has been contested by Pesticides Action Network (PAN) Europe⁸ ever since its adoption and was since found to be inappropriate by the European Court of Auditors.⁹ The auditors explained **that the supposed reduction indicated by the HRI-1 is mainly due to a decrease in sales of substances that are no longer approved (which move from a weighting factor category of 1, 8 or 16 to 64), and not to an actual reduction in pesticide use.** Thus, banned substances that are not used anymore will automatically trigger a pesticide reduction

⁸ PAN Europe, *Factsheet: Which indicator to best measure the EU objective of pesticides use and risk reduction*, 2021. URL: https://www.pan-europe.info/sites/pan-europe.info/files/public/resources/press-releases/PR%20with%20LIFE%20logo/20211202_PAN%20Europe%20position%20on%20pesticide%20indicator%20final.pdf

⁹ European Court of Auditors, *Special Report 05/2020: Sustainable use of plant protection products: limited progress in measuring and reducing risks*, 2020. URL: <https://www.eca.europa.eu/en/Pages/DocItem.aspx?did=53001>

compared to the baseline for national pesticide reduction targets. The Court of Auditors called on the European Commission to improve the HRI-1 already in 2020.

Besides, **the calculation method of the HRI-1 systematically overestimates the risk of naturally occurring substances used in organic farming compared to chemically synthesised substances.** A paper from GLOBAL 2000 (Friends of the Earth Austria)¹⁰ shows that, for instance, regarding the control of scab in a 1 hectare apple orchard, the HRI-1 measures a more than 800% higher risk for a single application of Potassium bicarbonate – a natural fungicide classified by the Commission as low risk active substance and used as baking powder – than for Difenconazole – a synthetic fungicide classified as candidate for substitution due to its combination of toxic and persistent properties (see below).

Comparison: Contribution of the application of potassium bicarbonate vs. difenoconazole to HRI-1

	POTASSIUM HYDROGEN CARBONATE	DIFENOCONAZOL
Approval	Organic (and conventional) farming	Conventional farming
Risk rating	Low risk Active substances	Candidates for Substitution
Weighting factor (WF)	1	16
Application rate per hectare	7,500 g/ha	56 g/ha
Contribution of this application to HRI 1	$7,500 \times 1 = 7.500$	$56 \times 16 = 896$

Source: GLOBAL 2000, HRI-1: a risk indicator to promote toxic pesticides?¹¹

GLOBAL 2000’s paper also drew the comparison between the use of sulphur and penconazole to control powdery mildew in viticulture. This example demonstrates that on the same area, the HRI-1 measures “a 200 times higher risk for a single application of sulphur in organic viticulture than for a single application of the synthetic chemical fungicide penconazole in conventional viticulture”.

Comparison: Contribution of the application of sulphur vs. penconazole to HRI-1

	SULFUR	PENCONAZOLE
Approval	Organic (and conventional)	Conventional farming
Risk rating	Approved active substances that do not fall into any other group	Approved active substances that do not fall into any other group
Weighting factor (WF)	8	8
Application rate per hectare	6,400 g/ha	32 g/ha
Contribution of this application to HRI 1	$6,400 \times 8 = 51.200$	$32 \times 8 = 256$

Source: same as above.

¹⁰ GLOBAL 2000, HRI-1: a risk indicator to promote toxic pesticides?, 2022. URL: https://www.organicseurope.bio/content/uploads/2022/06/GLOBAL2000_HRI-1_final_28022022.pdf

¹¹ Same than reference 10.

The HRI-1 indicator is a volume-based indicator which discriminates against naturally occurring substances allowed as pesticides in organic farming, which are all used in far greater amounts per hectare than chemically synthesised pesticides, due to a different mode of action, but for which the risk / toxicity is generally lower.

Even within conventional pesticides, there is a systematic bias in favor of the most toxic ones, whose toxicity is systematically underestimated when the HRI 1 is applied. This is particularly true for highly toxic insecticides such as pyrethroids or neonicotinoid-like pesticides, due to an **inverse correlation between the toxicity of active pesticide substances and their application rates per hectare**.

Relying on a misleading indicator to measure pesticides reduction is ineffective and **unfair to organic farmers who are the ones who strive to find alternatives to toxic chemically synthesized pesticides**. It is also in contradiction with the EU's target of reaching 25% organic agricultural area by 2030.

How to fix the issues mentioned above?

- **The SUR indicator should consider the area treated with a given dose of plant protection products**

IFOAM Organics Europe believes that indicators on pesticide use should consider the area treated with a given dose of pesticides.

There are already more suitable indicators used at national level in some Member States that:

- better take into account the area treated and toxicity profiles,
- rely on existing data on pesticides sales and hectares application rates which are easily available,
- and that can be readily used to fix the indicator used in the SUR to measure the reduction in the use and risk of pesticides.

As a first solution to fix the SUR's indicator, IFOAM Organics Europe proposes to have the calculation of a reference hectare application rate for each active substance from the hectare application rates of all plant protection products that contain the active substance in question, applying a clear and meaningful calculation rule.

Indeed, IFOAM Organics Europe published a **note¹² in June 2022 explaining that it is possible to build a better indicator on the basis of already available data on pesticides sales, taking into example the French indicator NODU (Nombre de Doses par Unité).**¹³

As mentioned by the French Ministry of Agriculture back in 2009¹⁴, the NODU was adopted in France because the previous indicator used (*'Tonnage of active substances'*) displayed the same limitations as the ones of HRI-1, which are that it is based on the absolute amounts of substances used without taking into consideration their hectare application rate.

The NODU gives information on the intensity of pesticides' use, with an indicator in hectares reflecting the total area that would be treated with the active substances sold annually. The advantage with this indicator is that it does not discriminate against natural substances. Moreover, the Commission and Member States already collect the data necessary to calculate the NODU. Also, even if still a more differentiated appreciation of risk profiles is lacking from this indicator, the treatable area is a far better indication of potential risk than mere volumes figures.

¹² IFOAM Organics Europe, *Proposal to develop a new indicator for monitoring the Farm to Fork pesticide reduction target*, 2021, URL: https://www.organicseurope.bio/content/uploads/2022/06/IFOAMEU_Policy_SUR_Indicators_Publication_202206.pdf?dd

¹³ French Minister's webpage on NODU. URL: <https://agriculture.gouv.fr/quest-ce-que-le-nodu>

¹⁴ Ministère de l'Agriculture, « La réduction des usages de pesticides : le plan Ecophyto 2018 - Le rôle des indicateurs d'utilisation pour évaluer l'atteinte des objectifs - Analyse n°4 », 2009. URL: <https://agriculture.gouv.fr/la-reduction-des-usages-de-pesticides-le-plan-ecophyto-2018-le-role-des-indicateurs-dutilisation>

Finally, we believe that the new **Regulation on Statistics on Agricultural Inputs and Outputs (SAIO) 2022/2379**¹⁵ will improve the collection at EU level of data on agricultural production, crop products, agricultural inputs, and prices. Indeed, data about pesticides use will be collected and published annually (until now, only data on pesticides sales were collected). The first set of data will be collected in 2026 and disseminated in 2028. The data on pesticide use should include active substances placed on the market and used in agricultural activities by crop and area. The number of statistics collected from organic farmers will be increased (the detailed dataset will be established via implementing acts). In particular, the data on pesticide use will distinguish between organic and non-organic farming.

Thus, **IFOAM Organics Europe calls on the EU institutions to refer to the SAIO Regulation in the SUR's Article 8 referring to the requirements of the national action plans to highlight its key role in measuring data on pesticides.**

But clearly, **the EU should not wait for the SAIO Regulation's effective implementation to improve the HRI-1 indicator**, which should be fixed during the co-decision process on the SUR. Data is already available to use a better indicator, based on the national plant protection products register that Member States are legally required to have. The other possible approach is based on the hectare application rates for the representative uses that have been subject to the active substance approval by EFSA. These data can be found in the **Implementing Acts on the active substance approval on the Commission's website**. Some government agencies are currently transcribing this data into a database, so that this data will also be available electronically and publicly.

- **Banned active substances should keep the same weighting factor, and the weighting factor category 64 should be deleted**

Secondly, IFOAM Organics Europe also calls the EU institutions to enhance the HRI-1 by deleting the weighting factor category 64, which retroactively increases the baseline, and automatically triggers a pesticide reduction compared to the baseline for national pesticide reduction targets. Banned pesticides should keep the same weighting factor as when authorized to avoid a retroactive increase of the baseline.

Nonetheless, this improvement alone is not sufficient because as mentioned above, it does not take into consideration the hectare application rate for active substances. The latter are set for plant protection products - not for active substances- and can vary according to the plant species, pest, and crop stage.

Therefore, as a key improvement to fix the SUR's indicator, IFOAM Organics Europe proposes to have the calculation of a reference hectare application rate for each active substance from the hectare application rates of all plant protection products that contain the active substance in question, applying a clear and meaningful calculation rule.

From current HRI-1 =

Sum of all active substance sales volumes multiplied by the corresponding weighting factors 1, 8, 16, 64

To improved HRI-1 with NODU =

Sum of all active substance sales volumes *divided by the respective reference hectare application rates of the active substances* and multiplied by the corresponding weighting factor 1, 8, 16, ~~64~~

- **Plant protection products used for indoors purpose should be excluded from the calculation method of the HRI-1**

IFOAM Organics Europe supports excluding plant protection products used for indoor purposes such as storage, in particular CO₂, from the HRI-1's calculation method. Indeed, as long as the calculation method of the HRI-1 is applied, this would grossly misrepresent the risk of the plant protection product and distort the potential reduction efforts.

¹⁵ EU Regulation (EU) 2022/2379 on Statistics on Agricultural Inputs and Outputs (SAIO). URL: <https://eur-lex.europa.eu/eli/reg/2022/2379/oj>

Recommendation No 4: Promoting organic farming in sensitive areas, in particular where agriculture takes place

The term ‘sensitive area’¹⁶ is defined under Article 3(16) of the SUR proposal.

The SUR proposal's Article 18 states that ‘the use of all plant protection products is prohibited in all sensitive areas and within 3 metres of such areas. This 3-metre buffer zone shall not be reduced by using alternative risk-mitigation techniques.’

IFOAM Organics Europe fully agrees that pesticide reduction is even more paramount in sensitive areas, including ecological ones.

Given minimising dependence on external inputs is at the heart of the organic approach to plant health, which relies mainly on preventive and indirect measures within the agroecosystem, **IFOAM Organics Europe believes that organic farming practises should be promoted in sensitive areas, particularly where agriculture takes place (Article 3(16) points (e) and (f)). Therefore, natural substances authorized under EU Organic Regulation 2018/848 and biocontrol products (both also used in conventional farming) should be authorised in these areas.**

Indeed, the overall benefits of organic production methods on the environment and biodiversity have been scientifically proven time and time again.¹⁷ Therefore by making organic production not only possible, but by promoting it in ecological sensitive areas these environmental benefits would be brought to where they are needed the most. When necessary, external inputs like plant protection products can be used but only if they are natural substances.

Chemically synthesised pesticides, and in particular volatile ones (*e.g prosulfocarb and pendimethalin*), can drift far into the environment and cause residues both in the environment, in the groundwater¹⁸, in the food¹⁹ and even in playground where children are exposed²⁰. **On the contrary, organic farming leads to a general reduction**

¹⁶ ‘sensitive area’ means any of the following:

- (a) an area used by the general public, such as a public park or garden, recreation or sports grounds, or a public path;
- (b) an area used predominantly by a vulnerable group as defined in Article 3(14) of Regulation (EC) No 1107/ 2009;
- (c) human settlements (community in which people live and work), defined as the most up to date CORINE (Coordination of information on the Environment) system maintained by the EEA Land Cover Level 1 classification (Artificial Surfaces) (excluding Level 2 – 1.2: Industrial, commercial and transport units and Level 2 – 1.3: Mine, dump, and construction sites) 80;
- (d) an urban area covered by a watercourse or water feature;
- (e) non-productive areas as defined under the EU standards on good agricultural and environmental condition of land (GAEC), GAEC standard 8 listed in Annex III to Regulation (EU) 2021/2115.
- (f) an ecologically sensitive area, which means any of the following:

(i) any protected area under Directive 2000/60/EC, including possible safeguard zones as well as modifications of those areas following the risk assessment results for drinking water abstraction points under Directive (EU) 2020/2184 of the European Parliament and of the Council 81;

(ii) sites of Community importance in the list referred to in Article 4(2) of Directive 92/43/EEC and the special areas of conservation designated in accordance with Article 4(4) of that Directive, and special protection areas classified pursuant to Article 4 of Directive 2009/147/EC, and any other national, regional, or local protected area reported by the Member States to the Nationally designated protected areas inventory (CDDA);

(iii) any area for which the monitoring of pollinator species carried out in accordance with Article 17(1), point (f), of Regulation xxx/xxx [reference to adopted act to be inserted] establishes that it sustains one or more pollinator species which the European Red Lists classify as being threatened with extinction.

¹⁷ One example for a large meta-study: https://www.thuenen.de/media/publikationen/thuenen-report/Thuenen_Report_65.pdf

¹⁸ Flemish Environment Agency, Exceedances of standards for pesticides in groundwater (2006-2017). URL: <https://www.vmm.be/water/grondwater/pesticiden-in-grondwater/normoverschrijdingen-pesticiden-grondwater#>

¹⁹ Mirjam Schleiffer, Bernhard Speiser, Presence of pesticides in the environment, transition into organic food, and implications for quality assurance along the European organic food chain – A review, Environmental Pollution, Volume 313, 2022, 120116, ISSN 0269-7491. URL: <https://doi.org/10.1016/j.envpol.2022.120116>

²⁰ Ramona Cech, Johann G. Zaller, Angeliki Lyssimachou, Peter Clausing, Koen Hertoge, Caroline Linhart (2023), Pesticide drift mitigation measures appear to reduce contamination of non-agricultural areas, but hazards to humans and the environment remain, Science of The Total Environment, Volume 854, 2023, 158814. URL: <https://www.sciencedirect.com/science/article/pii/S0048969722059137>

in pesticides²¹. No herbicides are used, and around 90% of organic farmland does not need any treatment with natural pesticides. A recent colloque from INRAE in France concluded that *“although the adoption of diversification practices is often accompanied by an (unquantified) reduction in the use of synthetic pesticides, it does not guarantee that they are abandoned, unlike regulatory constraints such as organic certification. Therefore, the combination of plant diversification (an agroecological tool) with organic certification (a regulatory tool) appears promising.”²²*

The association of drinking water suppliers in Germany has also called for the authorisation of organic farming in certain sensitive areas in a paper published in October 2022²³, as natural substances are more easily degraded and are not the problem; pesticides reduction efforts should focus on synthetic pesticides, which are new introduction into ecosystems and are not easily biodegraded.

Plant protection products based on **naturally occurring substances** are a small but essential element, mainly for organic speciality crops such as fruit, vine, vegetables, and potatoes. The substances authorised are selected based on a strict set of criteria, with the aim to exclude any inputs that may cause issues related to environmental, human and animal toxicity as well as only such substances which are of vital importance to organic production. The overall impact of organic agriculture on the environment is therefore limited, and studies show that on average organic fields sustain on average 30% more biodiversity²⁴ hence why organic agriculture should be the prerogative in ecological focus areas, which would mean that the use of naturally occurring active substances needs to be permitted.

In addition, potential bans on pesticides or classes of pesticides in certain areas should not lead to a subsequent cut on subsidies for environmentally sound practices. It would be counterproductive, if Member States could not adequately remunerate the conversion to and upkeep of organic production in areas where the resulting environmental services are most needed.

Recommendation No 5: Promoting organic agriculture in National Action Plans and protect it from drift

IFOAM Organics Europe welcomes that the Commission requested Member States to establish National Action Plans explaining how they intend to achieve **their national targets of pesticide reduction and link them with the parts of the CAP Strategic Plans setting out plans to increase organic farming** and contribute to the Farm to Fork Strategy’s **target of 25% of organic farmland by 2030, as stating in the Article 8(1).**²⁵

Given the specific characteristic of organic farming, a strong emphasis on organic agriculture in the revised SUR would make it one of the main levers for achieving the SUR’s objectives.

➤ **Protecting organic farming from drift of volatile substances**

²¹ Mäder et al. (2002): *Soil Fertility and Biodiversity in Organic Farming*. Science 296, 1694. URL: https://www.researchgate.net/publication/11333301_Soil_Fertility_and_Biodiversity_in_Organic_Farming_Science

²² INRAE, Colloque de l’Expertise Scientifique Collective, October 2022. URL: <https://gestion-diversite-vegetale.colloque.inrae.fr/diversification-des-couverts-vegetaux>

²³ Association paper: Strengthening drinking water protection and organic farming, 2022. URL: [Association paper: Strengthening drinking water protection and organic farming | BDEW](https://www.bdeu.org/association-paper-strengthening-drinking-water-protection-and-organic-farming)

²⁴ IFOAM Organics Europe, *Report on Organic Farming and Biodiversity*, 2021. URL: <https://read.organicseurope.bio/publication/organic-farming-and-biodiversity/options-for-future-policy/>

²⁵ The Commission’s proposal on SUR, Article 8(1) on National Action Plans states:

By ... [OP: please insert the date – 18 months after the date of application of this Regulation] each Member State shall draft and publish on a website a national action plan containing the following information:

(...)

(d) “a link to the relevant parts of CAP strategic plans, drawn-up in accordance with Regulation (EU) 2021/2115, which set out plans for an increase in the utilised agricultural area engaged in organic farming and how the plans will contribute to achieving the target set out in the Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions A Farm to Fork Strategy for a fair, healthy and environmentally-friendly food system⁵⁰ of having 25% of the utilised agricultural area devoted to organic farming by 2030”.

It is necessary to better protect organic farming from drift by amending *the* Article 8(1) on National Action Plans to add a paragraph to include measures to make **the criteria for approving plant protection products formulations stricter so that cases of drift** on neighbouring crops, including those under organic farming, such as those encountered with volatile substances (i.e.. prosulfocarb or pendimethalin) **do not occur anymore**.

Recommendation No 6: legally binding targets to achieve the Farm to Fork's objectives

IFOAM Organics Europe supports the inclusion of the Farm to Fork targets on pesticide reduction into the revised SUR to make them legally binding. The targets should be set at EU level while at the same time ensuring a minimum contribution of each Member States.

We support that Member States will have to define **national pesticide reduction targets** (between 35% and 60%, depending on their starting point) to contribute to the EU targets. **Nonetheless, as mentioned under point 3, if the HRI-1's calculation method is not changed, the calculation of the pesticide use reduction will not be accurate, and the calculation of pesticides risk reduction will not be properly measured.**

The "intensity of use" of pesticides should be considered to calculate Member States' targets (quantities of active substances divided by the number of hectares of utilised agricultural area in that Member State) (see Article 5(5)). Nonetheless, we would like to recall that **the pesticide reduction target must apply to both risk and use of pesticides, as reducing the use will not always mean reducing the risk.** Highly concentrated chemically synthesised pesticides are effective even used in little quantities. In organic agriculture, pesticides based on natural substances are often less efficient than chemically synthesised pesticides, so the number of applications and/or the quantities used may be more important. However, natural substances are often less persistent in the environment because they have a natural background so they can degrade faster under biological activity of the ecosystem. **Looking only at the quantities used would unfairly stigmatise naturally occurring substances (also used in conventional farming) and organic agriculture.**

Recommendation No 7: Setting measures that will guarantee the proper implementation of the SUR by Member States (indicators, penalties and budget in the CAP)

The SUR should make compulsory for Member States to set specific and **measurable targets and indicators** that are part of a long-term strategy to reduce pesticide risks and use. Setting up a set of **result-based indicators** would be an important step, e.g.: number of farms engaged in a pesticide reduction programme, percentage of land under IPM, percentage of land under organic agriculture, number of PPPs based on natural substances placed on the market, etc... Targets based on legal requirements (such as operator training) should not be considered when evaluating progress made by Member States on pesticide reduction, as Member States must fulfil this obligation in any case.

The SUR should include provisions that will allow the Commission to **impose penalties to Member States for underperformance** and to take legal actions in case of non-compliance, within short deadlines. The Commission should make effective and timely use of this powers. The SUR should also plan more **controls to check the implementation of IPM**. While the adoption of IPM principles is mandatory at farm-level, effective controls of IPM are very low. For instance, in Germany in 2018, 4.650 farms were controlled for their use of plant protection products. Given that there are 267.000 farms in Germany, statistically that is one visit every 58 years, which is far too little. In comparison, an organic farm is inspected once a year. Member States should be required to increase controls and enforce penalties where IPM measures are clearly not implemented.

The SUR should also include provisions allowing to evaluate the correct application of plant protection products according to labelling indications.

A better integration of the SUR in the Common Agricultural Policy (CAP) is the *sine qua none* condition to effectively achieve the objectives of the directive. Especially because there is no dedicated budget at EU level to help Member States to implement the SUR. Therefore, the National Action Plans should be drafted before Member States' national CAP Strategic Plans to be effectively integrated into the CAP (mainly through eco-schemes or Farm advisory services).

Recommendation No 8: Increasing the available alternatives with a dedicated registration process for natural substances

More coherence is needed between the SUR objectives and the EU authorisation process for active substances (EU Regulation 1107/2009²⁶), which needs to be adapted to natural substances. Inputs in organic agriculture are limited to 'natural substances' and IPM encourages biological pest control mechanisms. To achieve the SUR objectives, it is therefore necessary to increase the availability of alternatives to chemically synthesised pesticides, such as basic substances or plant protection products based on naturally occurring substances. However, as the current EU approval process for active substances is not adapted to naturally occurring substances, it prevents an increase in the availability of alternatives to chemically synthesised pesticides. Alternative methods such as **biocontrol are therefore not easily available while farmers are encouraged to adopt them in the SUR.**

A better coherence with the SUR would be possible by establishing natural substances as a category of their own in regulation (EC) 1107/2009. This is the legal prerequisite for a dedicated authorisation process considering the specific characteristics of these substances while stringently assessing their risks.

Natural substances must undergo a strict risk assessment to make sure that only natural substances that are safe for human health and the environment are authorised. The risk assessment of natural substances needs to be adapted to the specific characteristics of these substances, especially their prior existence in the natural environment, the complexity and variability of their composition and their wider range of uses. This would also ensure that the risk assessment of natural substances is not hampered by technical feasibility.



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²⁶ Regulation (EC) No 1107/2009 of the European Parliament and of the Council of 21 October 2009 concerning the placing of plant protection products on the market and repealing Council Directives 79/117/EEC and 91/414/EEC. URL: [EUR-Lex - 32009R1107 - EN - EUR-Lex \(europa.eu\)](#)