

A NONPROFIT AND INDEPENDENT ORGANIZATION THAT CAMPAIGNS FOR SUSTAINABLE FARMING IN EUROPE. POLLINIS FIGHTS AGAINST THE SYSTEMATIC USE OF PESTICIDES, FOR THE PROTECTION OF POLLINATORS AND PROMOTES ALTERNATIVE AGRICULTURAL PRACTICES. WE ARE SUPPORTED EXCLUSIVELY BY DONATIONS FROM PRIVATE INDIVIDUALS.

- August 2020 -

PUBLIC CONSULTATION

REFIT PROCEDURE OF THE "SUSTAINABLE USE OF PESTICIDES" DIRECTIVE 128/2009

The current agricultural system, built upon the dependence on pesticides, is not sustainable from an economic (exorbitant aid and increasingly more expensive chemicals), social (farmers' dependence on agrochemical industries and dwindling incomes) or ecological point of view.

Paradoxically, pesticides have significantly increased the risk of disease and pest outbreaks by promoting simplified, homogeneous and fragile crops and, in general, an agricultural system in which pollinators and other auxiliary insects, useful in controlling or limiting these disease and pest outbreaks, are gradually eradicated.

The biomass of insects has decreased by 2.5 % every year in the past 30 years [1]. This dramatic decline will have serious consequences on food security as 84% of cultivated species need animal pollination [2].

The IPBES (Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services) identified Plant Protection Products (PPPs) as one of the drivers of the decline in the pollinator population [3]. This is a grave consequence of the unsustainable use of pesticides.

As stated by the European Court of Auditors, "the Commission and Member States have taken action to promote the sustainable use of PPPs, but there is limited progress in measuring and reducing the risks of PPP use" [4].

POLLINIS calls for incentive measures to enforce IPM (Integrated Pest Management). Directive 2009/128/EC, also known as the SUD ("Sustainable Use of Pesticides Directive"), is a crucial tool to reach the goals outlined in the Farm to Fork Strategy.

POLLINIS calls on the European Commission to take six key actions: 1) turn the SUD into a Regulation; 2) reformulate the aim of the SUD; 3) review different options and possible alternatives to the current system; 4) improve enforcement of the SUD; 5) better monitor the use of pesticides and develop reliable indicators; 6) favour a systemic approach with strong commitment and coordinated and simultaneous action of all actors concerned.

1) TURN THE DIRECTIVE INTO A REGULATION

As observed by the Commission in its roadmap, we observe "significant shortcomings in the implementation, application and enforcement of various elements of the SUD across Member States". This very limited effectiveness can be explained by a lack of harmonization between Member States. The different National Action Plans (NAPs), adopted by Member States to implement the Directive, represent comparatively soft regulatory instruments and most of the targets and measures they contain are not legally binding. NAPs are closer in character to a declaration of intent and the success of their implementation depends on the degree of motivation of the actors involved, as well as on the funding available for implementation [5]. Uniform standards are all the more important in view of the issues at stake for the environment and public health.

This is the reason why POLLINIS calls on the EC to turn the Directive into a Regulation. We believe only a binding Regulation, combined with strict monitoring, would ensure implementation. Nonbinding measures must be avoided. **POLLINIS recommends to set legally binding quantitative use reduction targets along with clear timetables while transforming the Directive 128/2009 into a Regulation.**

2) REFORMULATE THE AIM OF THE SUD

The SUD was adopted in 2009 with the aim of "reducing the risk and impacts of the use of pesticides on human health and the environment." According to the Commission's roadmap, "*the evaluation will assess the extent to which the intended objectives of the SUD are relevant today.*" **POLLINIS stresses that, in order to harmonize the aim of the Directive with the Biodiversity Strategy** (which plans "to reduce by 50% the overall use of – and risk from – chemical pesticides by 2030 and reduce by 50% the use of more hazardous pesticides by 2030"), **the Commission should update the aim of the Directive in order to facilitate the reduction of the use of, and dependence on, pesticides**. Overall, the Directive should pave the way towards a phaseout of synthetic pesticides. Indeed, as a supporter of the European Citizens Initiative "Save Bees and Farmers" [6], POLLINIS asks for a phaseout of synthetic pesticides from EU agriculture, by setting a target to cut their use by 50% by 2025, by 80 % by 2030 and a full phaseout by 2035.

3) REVIEW THE DIFFERENT OPTIONS AND POSSIBLE ALTERNATIVES TO THE CURRENT SYSTEM

The development of less hazardous pesticides with new active substances with improved efficiency and better environmental profile than existing ones can be interesting to provide less dangerous alternatives to farmers in the short term. However, the development of chemical alternatives will ultimately prove insufficient. Indeed, scientists working on plant health alert us to the strong risk of ending up with no chemical solution to eliminate resistant pests for three reasons: "1. As toxicity levels increase, pest resistance against pesticides grows: there are already more than 550 types of pests which are resistant to one or more types of insecticides. 2. The essential Health and environmental protection legislation reduces the available legal chemical arsenal and limits the scope of agrochemical research. 3. The cost of developing a new molecule has risen from EUR 30 to 270 million since 1980" [7]. The agrochemical industry will not always be able to provide chemical solutions to the problems it creates, thus exposing the great vulnerability of the current agricultural system. Moreover, the highly discussed 'cocktail effects' (i.e. combined effects of several pesticides and co-formulants on non-target organisms) will probably not be solved by the creation of new pesticides [8]. Precision farming with agricultural robots, digitalization, big data, artificial intelligence, connected sensors, new biotechnologies, etc... would be too expensive for farmers and favours industrial-scale farming, which is the main driver of pollinator decline. In addition, the development of precision farming could increase farmers' dependence on agrochemical and high-tech industries. As a consequence, the Commission, which stresses in its Farm to Fork Strategy the importance of improving the position of farmers (who are key to managing the transition) in the value chain, should bolster agroecology rather than precision farming within the SUD.

Concerning "new genomic techniques" and "gene drive organisms," a report [9] published by the environmental protection and nature conservation agencies of several Member States highlights possible major negative effects of gene drive organisms on nature and the environment, including irreversible changes to food chains and ecosystems and loss of biodiversity. POLLINIS is concerned about the issue and demands a global moratorium on the release of gene drive organisms. Article 14 and Annex III of the SUD should state that new genomic techniques must not be included as IPM practices.

The improvement of the efficiency of chemical solutions with DSS (Decision Support System) like the French health plant "bulletin" (a database allowing to assess in real time the risks of pests) is actually the most encouraged solution by Member States. Such a monitoring system of forecasting and warning of pest presence in crops is an interesting tool, but we need to keep in mind that we can only expect limited progress from it in terms of reducing the use of pesticides. As a consequence, such a measure should not be the most widely supported action within the NAPs' funds [10].

European farmers are still too often told by their Farm Advisory System that "one pest problem <requires> one chemical input." However, a farm is a complex ecosystem with non-crop habitats, fields of various crops and associated living organisms that are interacting via trophic chains. "There is a clear need for a shift from single crop management towards a broader system. A broader approach to substantially decrease pest populations in crops needs an orientation towards spatially and temporally larger scales." [11]

POLLINIS calls on the Commission to foster:

- **non-chemical pest control techniques** and **biological control** (use of auxiliary insects or physical control such as mechanical weeding);
- integrated and sustainable **agronomic solutions** (intercropping, undersowing, more diverse and longer crop rotation, permanent soil cover, selection of varieties, agroecological infrastructures for beneficial biodiversity, etc.);
- **the organisation of collective dynamics at the level of territories** (to consider the landscape spatial arrangement with inter-annually changing crop mosaic and the relatively stable semi-natural habitats for population dynamics and pest management [12]);
- farmers knowledge and dissemination with **training on agro-ecological practices and IPM principles**, as stated in Article 5 of the SUD;
- the organisation of a Mutual Funds (MF) insurance approach, covering risk from IPM implementation. Such an approach has been successfully applied on a large scale for maize in Italy, showing that it is possible to avoid preventive treatments while bringing numerous advantages for farmers and ecosystems when implementing IPM [13].

These key actions have been partially forgotten by farmers and their advisors. However, there is an urgent need to adopt and develop these key actions under the light of growing scientific knowledge in order to favour natural mechanisms rather than to disturb the functioning of the ecosystems.

4) IMPROVE THE ENFORCEMENT OF THE SUD

Member States and farmers cannot take all the blame for the poor implementation of the SUD. Indeed, the Commission could act on its own trade policy, which exposes the European farmers to an unfair international competition, or on the Common Agricultural Policy (CAP), which does not favor the achievement of the SUD objectives. Indeed, measures included in the CAP are not sufficiently strong to efficiently implement IPM or promote organic farming. The previous CAP reforms were not successful in reducing the use of pesticides in Europe. Instead, the consumption of pesticides increased during recent years [14]. Enhanced conditionality constitutes the baseline for a more sustainable and ambitious agriculture and new obligations must be added in order to encourage farmers to engage in holistic changes strengthening biodiversity and, more generally, to target high-level and ambitious environmental criteria, in particular, compliance with obligations arising from the SUD, the Farm to Fork Strategy, the Biodiversity Strategy, the Habitats Directive, the Water Framework Directive and the Birds Directive. POLLINIS asks the Commission to include reduction targets into cross-compliance from the CAP by linking payments to the respect of IPM. The timeline of the REFIT should not impede the modification of the CAP. The Commission must proceed with all legislative changes needed to guarantee coherence between the EU policies. A new conditionality, which would include the respect of IPM principles, should be based on simple administrative rules for farmers and feasible control of compliance at a large scale.

To do so, the Commission should establish criteria on how the authorities can assess compliance with IPM principles and on how professional users should apply these principles. These criteria must include assessment of compliance with Article 67 of EU Regulation No 2009/1107, which states that *"professional users of plant protection products shall, for at least 3 years, keep records of the plant protection products they use, containing the name of the plant protection product, the time and the dose of application, the area and the crop where the plant protection product was used".*

Finally, as an immediate improvement of the protection of human health and biodiversity in the EU, POLLINIS recommends that the Commission should limit IPM to agricultural production only, while completely banning the use of pesticides in public areas (parks, playgrounds, schools, cemeteries), in private gardens and for non-agricultural use. This has already successfully been done in France with the Labbé Law [15] and could easily be achieved at the European scale.

5) BETTER MONITOR THE USE OF PESTICIDES AND DEVELOP RELIABLE INDICATORS

The monitoring of EU pesticide uses (regulation EC No 1185/2009) is fundamental and needs to be improved and harmonized, as recently declared by the EU Court of Auditors [4]. A reliable database on PPP uses, which should include indicators relevant for national volumes according to crop-specific criteria and based on statistical data directly submitted by farmers, constitutes a key element to reflect the overall effectiveness of measures aiming at replacing synthetic inputs by sustainable alternatives. POLLINIS highlights the need of full transparency and public access to useful and comparable data between Member States. This is a key issue, which should be a priority.

The European Court of Auditors states that the two HRI (Harmonized Risk Indicators) do not show "the extent to which the directive has been successful in achieving the EU objective of sustainable use of PPPs" [4].

The auditors recommend updating the HRI as follows:

 \cdot HRI1 should be updated to consider the way PPPs are used.

· HR2 should be updated to consider the agricultural areas or volumes of active substances/PPPs.

POLLINIS asks the Commission to follow the recommendations made by the ECA to improve these indicators.

However, these HRIs' usefulness depends on the quality of the data communicated by Member States. The HRIs cannot be calculated without detailed statistics on sales and uses of PPP. Discrepancies between data collected by Member States and lack of details represent major impediments to the compilation of those statistics, and thus, to the implementation of the Directive. This problem must be addressed through the establishment of clear, detailed, and harmonized databases and statistics at the European level. **Moreover, EU rules on data confidentiality should be revised in order to reinforce transparency. Statistics related to individual active substances should be made publicly available at the EU level**.

6) FOSTER A SYSTEMIC APPROACH WITH STRONG COMMITMENTS, COORDINATED AND SIMULTANEOUS ACTIONS OF ALL ACTORS CONCERNED

Our current food production system is fully integrated within the agro-industrial sector. Indeed, all actors have adapted their strategy and partnerships based on the use of chemical inputs (pesticide and fertilizers), each reinforcing the strategy of the other, without any interest in possible alternatives. This "socio-technical lock-in" is slowing down the development and spread of alternatives to pesticides. **"The main failure of the SUD is due to the omission of the "socio-technical lock-in" including a wide range of actors all interdependent and strongly engaged in pesticides "logic of uses"** [16].

An ambitious progressive phaseout of pesticides is possible only if all the actors concerned (scientists, decision makers, plant breeders, farmers, agricultural advisors, food processors, retailers, consumers, etc...) act together to "unlock" this barrier. **POLLINIS urges the Commission** to harmonize all relevant EU policies currently under discussion, especially the Green Deal and the CAP reform, in order to establish integrated actions involving all stakeholders and aiming at phasing out pesticides.

In conclusion, as stated in a report from the Commission to the European Parliament on the implementation of the Directive, dated May 2020: "enforcement of IPM is low, and there is limited evidence that IPM principles are systematically applied." [17]. This REFIT procedure is a great opportunity for the Commission to reach the objectives of both the Farm to Fork and the Biodiversity Strategies.

REFERENCES

[1] Sanchez-Bayo, F *et al.* (2019). *Worldwide decline of the entomofauna: A review of its drivers.* Biological Conservation, 232, 8-27.

[2] Opie - Office pour les insectes et leur environnement <u>http://www.consultations-publiques.developpement-durable.gouv.fr/IMG/pdf/Synthese_V2.pdf</u>

[3] IPBES (2016). The assessment report of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services on pollinators, pollination and food production. https://doi.org/10.5281/zenodo.3402856

[4] European Court of Auditors (2020). Special Report. *Sustainable use of plant protection products: limited progress in measuring and reducing risks.* <u>https://www.eca.europa.eu/Lists/ECADocuments/SR20_05/SR_Pesticides_EN.pdf</u>

[5] Frische, T *et al.* (2018). *5 Point programme for sustainable plant protection.* Environ Sci Eur, 30, 8. <u>https://doi.org/10.1186/s12302-018-0136-2</u>

[6] POLLINIS. Save Bees and Farmers. <u>https://info.pollinis.org/ice-save-bees-and-farmers/</u>

[7] Position paper from POLLINIS (2016). *Why the EU should embrace integrated pest management*. <u>https://www.pollinis.org/admin/wp-content/uploads/2020/07/ipm-position-paper-engl-march16.pdf</u>

[8] Kiss, J. (2019). *Pesticides in agriculture: are we sustainable yet?* Journal of Consumer Protection and Food Safety, 14, 205–207.

[9] Dolezel, M *et al.* (2019). *Gene Drive Organisms. Implications for the Environment and Nature Conservation.* Umweltbundesamt, Vienna.

[10] Synthèse du rapport de l'étude Ecophyto R&D. (2010). *Quelles voies pour réduire l'usage des pesticides ?*

[11] Storck, V *et al.* (2016). *Towards a better pesticide policy for the European Union*. Sci Total Environ, <u>http://dx.doi.org/10.1016/j.scitotenv.2016.09.167</u>

[12] Rusch, A *et al.* (2012). *Local and landscape determinants of pollen beetle abundance in overwintering habitats.* Agricultural and Forest Entomology, 14, 37–47.

[13] Furlan, L *et al* (2015) *Mutual funds are a key tool for IPM implementation: a case study of soil insecticides in maize shows the way.* <u>https://www.researchgate.net/publication/272823066_</u>

[14] Ministère de l'Agriculture. (2015). *Tendances du recours aux produits phytopharmaceutiques de 2009 à 2014.* Note de suivi Ecophyto.

[15] Loi n<u>° 2014-110 du 6 février 2014 visant à mieux encadrer l'utilisation des produits</u> phytosanitaires sur le territoire national.

[16] Guichard, L *et al.* (2017). *Le plan Ecophyto de réduction d'usage des pesticides en France : décryptage d'un échec et raisons d'espérer.* Cahiers Agricultures, EDP Sciences, 26, 1-12.

[17] Report from the Commission to the European parliament and the Council, *On the experience gained by Member States on the implementation of national targets established in their National Action Plans and on progress in the implementation of Directive 2009/128/EC on the sustainable use of pesticides* (2020).

https://ec.europa.eu/food/sites/food/files/plant/docs/pesticides_sud_report-act_2020_en.pdf