POLLINIS

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.

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# CONTRIBUTION TO THE PUBLIC CONSULTATION ON THE EU 2030 BIODIVERSITY STRATEGY

While welcoming the aims of the EU 2030 Biodiversity Strategy, POLLINIS stresses the importance of tackling the root causes of the present dramatic decline of insect populations and, in particular, of pollinators, in order not only to halt but also to overturn the present negative trends. These root causes are, first and foremost, the loss of pollinators' habitats and their exposure to pesticides.

Insect population decline is taking place at an alarming rate. The most recent scientific evidence is overwhelming: the proportion of insect species decline (41%) is twice as high as that of vertebrates, and the paceof local species extinction (10%) eight times higher. Globally, over a third of all insect species are threatened with extinction[1].

In Europe, 76% of flying insects have disappeared from German protected areas[2], which represent a constant declining trend of 2.8% per year, a figure that can be extended to the whole of Europe, according to the authors. Pollinating insects (Lepidoptera, Hymenoptera and Coleoptera) are particularly endangered, with many species extinct or threatened with extinction. Behind the well-documented loss of honey bees, there is a wider problem: the collapse in quantity and diversity of European wild pollinating insects.

About a third of bees and butterflies are declining (excluding data deficient species, which includes 57% of bees). For the latter, where national Red List assessments are available, often more than 40% of bee species may be threatened[3], with a trend extinction of one in six species[4]; more than 60% of Coleoptera species are declining in Mediterranean countries, with large proportion considered threatened[5].

1 Data from a meta-analysis of 73 studies published in the last 13 years (Sánchez-Bayo & Wyckhuys, 2019). See also Dirzo *et al*., 2014 ; IPBES, 2016.

2 Hallmann *et al*., 2017.

3 IPBES, 2016.

4 Sánchez-Bayo & Wyckhuys, 2019.

5 Sánchez-Bayo & Wyckhuys, 2019. See also Potts *et al*., 2015.

Considering the crucial role that insects, and pollinators in particular, play in the reproduction of ecosystems and in agricultural production, their plummeting decline will trigger catastrophic repercussions, on both biodiversity and food security.

Growing scientific evidence indicates that the main drivers of pollinators' decline are loss of habitats and exposure to pollutants, linked to intensive, industrial scale farming practices[6] : genetically-uniform monocultures, massive use of synthetic pesticides and fertilizers, land-use change and landscape fragmentation, elimination of hedgerows and trees.

Because these agriculture practices are the root cause of insect decline, the implication is clear: as stated by the authors of a recent meta-analysis on insect decline (encompassing 73 studies published in the last 13 years)[7], "*Unless we change our ways of producing food, insects as a whole will go down the path of extinction in a few decades*". The EU needs to make this transition now: we only have limited time to act.

Thus, in order to preserve pollinators and the whole ecosystem in which insects are the structural and functional base, the 2030 EU biodiversity strategy must focus, as key priorities, on the transition to diversified agroecological systems and the phasing out of the use of synthetic pesticides and fertilisers, including EU-wide binding reduction targets on pesticide use.

Without the clear objective of a paradigmatic shift in agricultural practices, leading to a pollinator-friendly and sustainable food system, based on the diversification of farms and farming landscapes, the replacement of chemical inputs, the optimisation of biodiversity and of the interactions between different species (i.e. 'diversified agroecological systems')[8], it is likely that the future strategy will fail, as did the two preceding ones.

This ambitious objective must be achieved through a cross-sector approach, in which the 2030 EU biodiversity strategy is interwoven with the different EU policies that affect food production and mainstreamed in the relevant EU regulations, to ensure ambitious and enforceable legal measures and binding targets.

In this perspective, sectoral policies should be realigned with the biodiversity strategy goals: especially the future CAP must ensure consistency of farm practices with biodiversity conservation and the preservation of wild pollinator populations. The strengthening of systemic agri-environment measures (AEM) and the transition to organic farming need to be a priority of the next CAP.

6 Among others, Brooks *et al*., 2012; Dudley and Alexander, 2017; Fox, 2013; Habel *et al*., 2019; Harvey *et al*., 2020; IPBES, 2016; Ollerton *et al*., 2014; Sánchez-Bayo & Wyckhuys 2019; Wilcove *et al*., 1998. Specific bibliographical references on the impact of pesticides on pollinators are too many to be listed here, but see the work of the Worldwide Integrated Assessment (WIA) of the Impact of Systemic Pesticides on Biodiversity and Ecosystems (http://www.tfsp.info/assets/WIA_2015.pdf, and in particular: Giorio *et al*., 2017; Pisa et al., 2014; Van Lexmond *et al*., 2015), which has made a synthesis of 1,121 published peer-reviewed studies.

7 Sánchez-Bayo & Wyckhuys 2019.

8 IPES-Food, 2016.

Finally, to complement this main objective, other initiatives aiming at a comprehensive protection of pollinators should be included in the new strategy, including :

- The inclusion of all the actions identified by the EU Pollinator Initiative, as amended by the recent PE resolution[9], which should become an integral part of the Strategy.

- The restoration, creation and protection of pollinator-friendly habitats through the maintenance of natural areas, wildlife set-aside land, wild-flower set aside, grass strips, grasslands, hedgerow and tree management measures, which supply essential resources for pollinators, and form ecological corridors favouring species movements.

- The preservation of local bee species and sub-species, through the establishment of conservation areas on the different geographical habitats of these species and their legal recognition.

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9https://www.europarl.europa.eu/doceo/document/TA-9-2019-0104_EN.html

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