



European policy background for pollinator monitoring

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Solutions to monitor plants, pollinators and their interactions in a changing world*



Policy context

- [European Green Deal](#)
- [EU Biodiversity Strategy for 2030](#)
- [EU Pollinators Initiative](#)
- [Resolution from the European Parliament](#)
- [ECI “Save Bees and farmers”](#)



Reverse pollinator decline by 2030

[EU Pollinators Initiative](#) + [Nature Restoration Law](#)

42 actions across 3 pillars:

- I. Improving knowledge
(including pollinator monitoring)**
- II. Tackling causes of pollinator decline**
- III. Mobilising society and strategic planning**



Pollinator monitoring methodology

- Scientifically robust, capable of detecting trends
 - Transects
 - Species level identification (diversity, abundance)
- 2021 JRC [report](#)
- Science and Technology for Pollinating Insects ([STING](#))
- Strengthening pollinator recovery through indicators and monitoring ([SPRING](#))
- [EUBP Working Group on Pollinators](#)
Task Force on Monitoring and Indicators

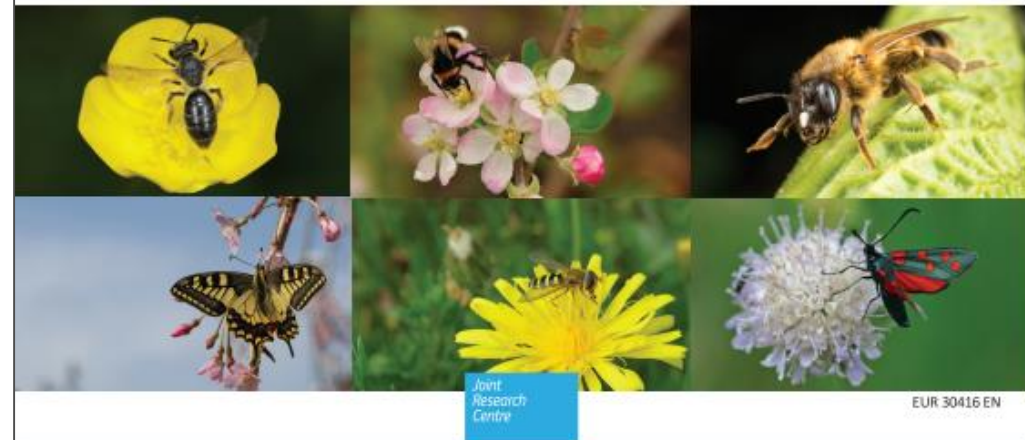


JRC TECHNICAL REPORT

Proposal for an EU Pollinator Monitoring Scheme

Simon G. Potts, Jens Dauber, Axel Hochkirch, Bas Oteman, David B. Roy, Karin Ahmé, Koos Blesmeijer, Tom D. Breeze, Claire Carvell, Catarina Ferreira, Úna FitzPatrick, Nick J.B. Isaac, Mikko Kuussaari, Toshiko Ljubomirov, Joachim Maes, Hien Ngo, Adara Pardo, Chiara Polce, Marino Quaranta, Josef Settele, Martin Sorg, Constanti Stefanescu, Ante Vujčić

2021



Taxonomic capacity building

Development of tools: [ORBIT](#) [TAXOFLY](#) [MAMBO](#)

Training of experts: [TETTRIs](#) [SPRING](#)

[New call for capacity building in pollinator taxonomy \(bees, hoverflies, and butterflies\)](#)

EUR 3 million



Integrated monitoring

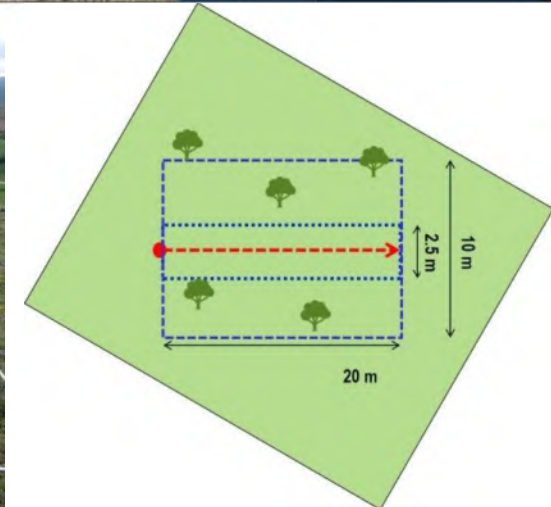
DPSIR framework: *drivers - pressures - state - impact – response*

- Habitat quality (including floral diversity): [EMBAL](#)
- Landscape features: [LUCAS](#) ([LUCAS grassland](#))
- Pesticide pressure: [Insignia](#)



LUCAS Grassland Module

- Information on the environmental and ecological quality of the grassland
- Information on type and intensity of grassland use
- Pilot 2018: 3734 grassland points, botanical survey on 747 points
- Rollout 2022: on 12.099 points
- Survey method: 20 m transect
- Parameters: Habitat type, Environmental Conditions, Age of grassland, Use type and intensity, Vegetation structure, Biodiversity value, Pollinator value



EMBAL (European monitoring of biodiversity in agricultural landscapes)

- Farmland biodiversity and habitat quality
- 500 m x 500 m plots – landscape information
- 3000 plots across EU-27, sampled in 2022 and 2023

(1) Plots $\xrightarrow{\text{inside plots}}$ (2) Parcels and landscape elements $\xrightarrow{\text{inside parcels}}$ (3) Vegetation transects



1. Mapping

- Extent / type of LE
- Patch density
- Area per LC
- Type of LC
- Nature values of LC / LE



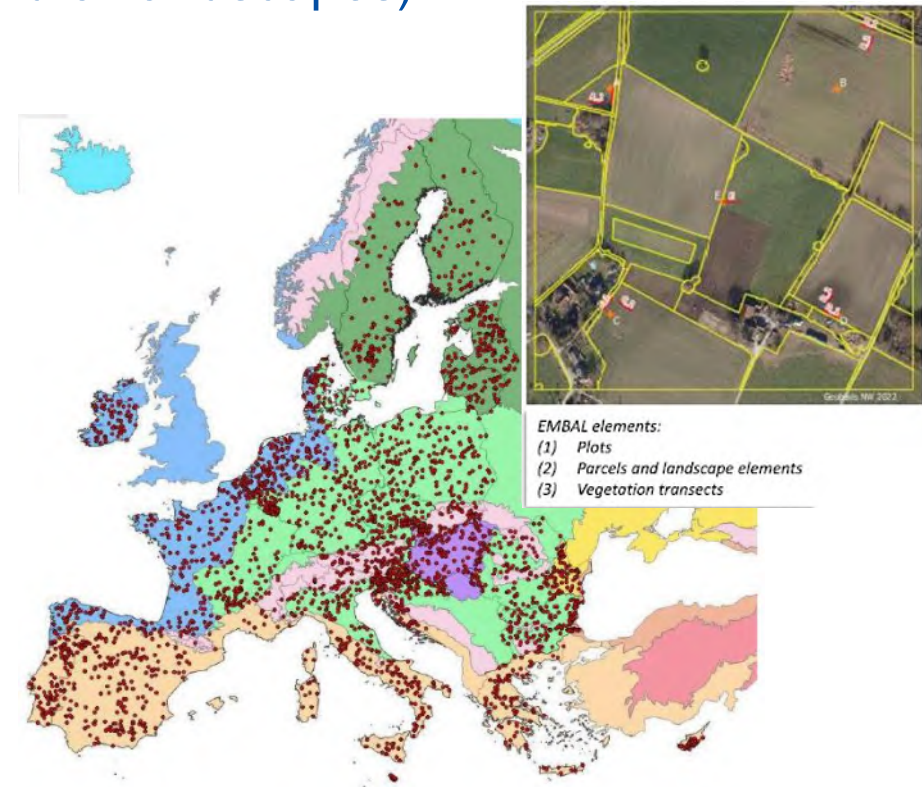
2. Transects

- Species richness
- Species composition
- Structure of vegetation
- Pollination potential
- Coverage of wild plants



3. Photo documentation

- Cross-check with data of surveyors
- Documenting changes over time



Thank you!

For more information:

[#EUPollinators](#)

Small, precious and in need of protection!

[EU Pollinator Information Hive](#)

