

PRESS RELEASE

**UNDER STRICT EMBARGO UNTIL FRIDAY 9 DECEMBER 2022 AT 12.30 pm (MONTREAL TIME) - 6.30 pm (UTC +1 - PARIS TIME)**

**AT COP15 BIODIVERSITY SUMMIT, 100 SCIENTISTS, EXPERTS AND ORGANISATIONS CALL ON WORLD LEADERS TO PROTECT POLLINATORS FROM THE DANGERS OF GENETIC BIOTECHNOLOGY.**

**MONTREAL - 9 December 2022. 100 scientists, experts and organisations\* from around the world have joined forces to alert international decision-makers of the dangers of genetic biotechnology posed to pollinators, whose current decline threatens the balance of all ecosystems and global food security.**

Leading scientists in the fields of molecular biology, genetics, pollinator ecology and agroecology, as well as experts in pollinator protection, environment, conservation and beekeeping, are launching an appeal to the representatives of the countries gathered at COP15 biodiversity summit. In order to protect pollinating insects, which are essential for the production of 76% of the world's major food crops, the signatories of this Scientific Appeal call for:

- a strict application of the precautionary principle (as defined by the United Nations);
- an opposition to the release into the wild of products, components and organisms obtained through genetic biotechnology, such as genetically engineered molecules and genetically engineered organisms.

**[READ THE INTERNATIONAL APPEAL IN FULL](#)**

Signatories include agro-ecology and pollination specialist Lucas A. Garibaldi, biologist Dave Goulson and honey bee specialist Thomas Seeley.

These new genetic engineering methods, developed by agrochemical companies in particular to replace chemical pesticides in the fields, make it possible, for example, to deactivate certain vital functions in insects considered to be harmful, by targeting the expression of their genes through RNA interference, thanks to the genetic silencing technique. The extreme and controversial outcome of these new techniques is genetic forcing, which makes it possible to introduce a gene into a species by forcing its systematic transmission to its descendants. By transmitting an extinction gene (infertility), genetic forcing can thus lead to the disappearance of an entire species within a few generations.

The development of agricultural applications of genetic forcing has multiplied in recent years. Today, [21 crop pests](#) are the subject of targeted research, and [several patent applications](#) have

been filed by companies. The agricultural application of gene silencing (via genetically modified plants, bacteria or viruses, or by spray) is even more advanced, as some applications have already been approved in the [United States or Canada](#).

While the arrival of these new pesticides in the field is being actively prepared, their potential effects on pollinators and other living organisms remain poorly understood and understudied. However, the first independent scientific studies point to the risk of lethal effects on non-target insects when they share a similar gene with the targeted pest species.

And yet, there are now "plans to open the way for the potential release of organisms or products obtained through genetic biotechnology", the signatories warn, pointing out that "all these applications [...] carry unstudied risks that could accelerate the decline of pollinator populations and endanger the entire food chain".

## QUOTES

"We call for a strict application of the United Nations' precautionary principle, and to prevent any further dissemination until there is evidence that the use of these biotechnologies, their products, organisms and components will not have a direct or indirect negative impact," warn the signatories of the Appeal.

"The dynamic relationships that exist between pollinators and the other ecosystem links, such as microorganisms that live in the soil, plants and birds, show that it is impossible to intervene in the genome of an individual, without interacting with the whole of its species, other species and, more broadly, with all of biodiversity. By modifying an individual, we are potentially modifying the living world as a whole," warns Nicolas Laarman, General Director of POLLINIS.

"We cannot afford to run new genetic experiments in open-air ecosystems, especially when they risk pollinators and human health. Insect and bee populations, which are essential to our food system, are dying at alarming rates. The CBD must take immediate, precautionary action to ensure our health and environments are protected" says Dana Perls, Senior Food & Agriculture Program Manager with Friends of the Earth USA.

"The global loss of insects is staggering, yet insects and pollinators are hardly discussed at the Biodiversity Convention, explains Adam Breasley, head of international outreach for Save our Seeds. Gene drives threaten further havoc for insect and pollinator ecologies. Insects and pollinators are essential for life including humans and have intrinsic value. We need to be protecting biodiversity, not developing technologies targeting species for elimination"

"Not only gene drive organisms, but other new forms of genetic engineering, are already being released without a process of technology assessment that would include a process whereby their

potential risks could be assessed. On the horizon we have detected even more worrying developments, such as GM viruses and self-spreading vaccines, which has already been released in the United States, funded by DARPA. We must have a moratorium on all these technologies and these negotiations at the CBD this week can play an important part in that” says Tom Wakeford, Europe Director ETC Group

## CONTEXT

During the 15th UN Biodiversity Conference (COP15), which takes place in Montreal from 7 to 19 December, leaders are expected to adopt revised international targets for the protection of biodiversity by 2030, in order to halt the ongoing destruction of ecosystems and combat biodiversity extinction. Insects, and more specifically pollinators, are at the forefront of this mass extinction, and as such must be given special attention by international decision-makers in these negotiations.

Among the 22 objectives of the new global biodiversity framework currently being negotiated, the issue of the central role of pollinators in ecosystems will be addressed through several objectives (2, 3, 4, 7, 9, 10), but also through objective 17, which targets the issue of the potential risks of genetic biotechnologies for all living organisms, of which pollinators could be the first victims. The content of this objective, which is to be negotiated in Montreal, could provide a strict framework for the release into the wild of organisms and products resulting from these biotechnologies, or, on the contrary, pave the way for facilitating their use in the wild.

*\*\* The number of signatures is subject to change until the end of the embargo.*

## PRESS CONTACTS

Cécile Barbière (Paris)

[cecileb@pollinis.org](mailto:cecileb@pollinis.org)

+33 6 63 93 84 86

Vanessa Mermet (Montreal)

[vanessam@pollinis.org](mailto:vanessam@pollinis.org)

+33 6 68 43 18 49