

Brussels, 18 July 2025

Beekeepers Call on IUCN to Support a Moratorium on Genetic Engineering in Wild Species

Context:

The use of genetic engineering in nature conservation—such as modifying corals or eliminating invasive species—has sparked intense debate. At the upcoming IUCN World Congress in Abu Dhabi in October, members will weigh two motions on the role of “synthetic biology.” While some advocates favour the use of synthetic biology, others warn that such technologies pose risks to biodiversity, are challenging to control, and may conflict with the IUCN’s conservation principles. They advocate for a moratorium on genetically engineering wild species in natural ecosystems. Online debates between NGOs and biotech advocates have been heated. The controversy has delayed voting on the motions, pushing the final decision to the in-person Congress. The outcome could shape the future of conservation policy worldwide.

In this framework:

We, the beekeeping community, urge the IUCN members to support Motion 133 and establish a moratorium on the genetic engineering of wild species.

Proposals to release genetically engineered plants and animals into natural or near-natural ecosystems pose unacceptable and unquantified risks. One example is the genetically engineered American chestnut, now undergoing field trials in the US. It could have irreversible consequences for ecosystems – but the environmental consequences have not been assessed.

Healthy ecosystems are essential for pollinators.

Pollinators such as bees, flies or butterflies depend on healthy, biodiverse ecosystems. Today, these systems are already under severe stress. Introducing genetically engineered wild species could destabilise evolutionary processes, undermine natural adaptation—particularly in response to climate change—and threaten the integrity of the ecosystems our bees rely on. And the question remains: Can genetically modified **plants and** animals that are released into the wild be considered wild **species** at all?

There are no adequate safeguards.

We beekeepers speak from experience. For decades, agrichemicals such as DDT, or neonicotinoids were allowed without adequate assessment, leading to devastating, long-term pollution and impacts on bees and the environment – impacts we are still battling today. We fear history may repeat itself. Current regulations lack the capacity to fully assess, monitor, and manage the risks of genetically engineered organisms once they are released into the wild. Once released, they can no longer be retrieved from the environment.

Beekeepers will be among the first affected.

Genetically engineered plants may expose bees to novel biological traits, with unknown impacts on their health and behaviour. Worse, bees may unwittingly become vectors for spreading engineered genes. Today, we have no clear framework for liability or redress. If entire honey bee colonies collapse or environmental damage occurs, who will be held accountable? Who will compensate beekeepers and communities? Could the beekeeper be held responsible for having placed hives that encouraged the spread of specific genes?

When it comes to environmental problems, beekeepers are like the canary in the coal mine. When beekeepers realise what is happening to their bees, it means that something is happening to other pollinators as well. Yet again, it will take decades to remove the harmful products from the market, and the consequences will be left for society or the environment to deal with.

A healthy environment makes for a healthy product.

Consumers expect beekeeping products, such as honey, pollen or propolis, to be pure, natural products. If bees forage on genetically engineered plants, we can no longer guarantee this. Tampering with nature threatens not only pollinators but also the trust and safety of the food supply they support.

Now is the time to act.

The IUCN must demonstrate leadership. A **moratorium is a reasonable and precautionary measure**—a pause to ensure we understand the ecological, ethical, and legal implications before proceeding. Once released into the wild, genetically engineered organisms cannot be contained. We must not gamble with the future of our ecosystems and pollinators.

We ask IUCN to uphold its responsibility to nature and biodiversity by supporting Motion 133 and adopting a moratorium on the genetic engineering of wild species.