UK company plans to release genetically engineered flies in Spain

Trial puts biodiversity and olive production in the Mediterranean region at risk

Monday, 27 July 2015

The UK company Oxitec is planning to release genetically engineered olive flies into the environment in Spain (Catalonia). The insects are genetically manipulated in such a way that female descendants will die as larvae feeding inside the olives, while the next generations of male flies will survive. Oxitec plans to release up to 5000 of these flies per week in Spain, near the town of Tarragona. The field trial expected to last for one year will cover a netted area of 1000m². However, if the flies escape they can spread without any control. Olive flies are regarded as a species that spreads rapidly in a suitable habitat. Over time their offspring might be distributed throughout the Mediterranean region and all the locations where native populations occur. A broad coalition of mostly representative organisations from Mediterranean countries such France, Greece, Italy, Portugal and Spain are demanding that any release of these flies should be banned completely.

The intention of Oxitec is that the male transgenic flies will mate with the female native flies, and thereby introduce their artificial genes into the native population. As a result, it is thought that the population of native olive flies will decrease and eliminate economic damage to olive production. If the technology goes ahead as planned by Oxitec, it could, after a long period of time, lead to a reduction of the fly species population in the areas affected. Biodiversity could be severely disrupted, with all the various potential consequences and side-effects for the sensitive balance of the ecosystem, the environment and food production systems. Additionally, there is a high likelihood that the artificial genes will end up being permanently present in the native populations. The Oxitec flies are manipulated with synthetic DNA, which is a mix of maritime organisms, bacteria, viruses and other insects. While Oxitec claims their strains were genetically stable in the laboratory, nobody can predict genetic stability or the ecological behaviour of these insects once released.

"Releasing genetically engineered insects into the environment is a dangerous experiment that will effectively turn the whole of Europe into an open air laboratory. Insects do not respect boundaries and no sterility is 100% effective. They could escape the test area and if, as with many experiments, things do not go according to plan, it will be impossible to shut the experiment down. And any control or withdrawal of the genetically engineered insects would be impossible, even more so than GE crops." says Dr Janet Cotter of the Greenpeace International Science Unit

Margarida Silva, from Portuguese GM-Free Coalition says: "We must not tolerate irresponsible experiments that will inevitably translate into accidental releases of genetically engineered animals into the environment. With the planetary support systems already under stress, any further irreversible damage is unacceptable. In addition, no consumer is interested in eating olives stuffed with dead GM larvae. It’s time we invested in holistic and sustainable crop protection that puts consumers and farmers on the same page."

Victor Gonzálvez, from SEAE (Sociedad Española para la Agricultura Ecológica, IFOAM EU member) says: "Spain is the first producer of organic olive oil worldwide with an extension of 170,000 hectares of arable land. If in any case, the olives are in contact with the new biotech fly larvae, organic producers could lose certification and consumer trust in organics would be undermined. Moreover, the impact on human health is not properly assessed."

“This technology appears to have the potential to endanger biodiversity, organic farming and the future of olive production in the Mediterranean region. We assume this experiment is driven by the interests of Oxitec and its investors to gain maximum profit from its patented technology”, says Christoph Then for Testbiotech, “It is time to give a clear signal that these organisms should not be released. Nowhere. Never.”

It is not clear if the experiments have yet been authorised by the national authorities. If so, it would...
be the first release of genetically engineered animals in the EU. In 2013, the first application to conduct field trials in Spain was withdrawn after public protests. The recent Oxitec application was filed in March 2015. However, it did not appear in the EU public register before last week. The planned start of the release is July 2015.

Olive flies are known to cause substantial economic damage to olive producers. Currently, olive flies are controlled with insecticides, or by using biological means such as insect traps, sustainable pruning, irrigation practices or irradiated sterile insects. The negative socioeconomic impacts of the field trials might be immense. For example, organic farmers might not be able to avoid their products coming into contact with these flies, and therefore their food products might then contain the biotech-larvae. Markets could be lost as a consequence – and in an extreme scenario, the whole of the harvest in the Mediterranean area could be affected if consumers reject those products.

Organisations signing: Amigos de la Tierra (Spain), Agrobio (Portugal), BiotechWatch (Greece), Criigen (France), Federation Nationale d’ Agriculture Biologique, FNAB (France), Ecologistas en Acción (Spain), Generations Futures (France), Greenpeace (Spain), OGM dangers (France), Plataforma Andalucía Libre de Transgénicos (Spain), Portuguese Plataforma Transgénicos Fora (Portugal), Red de Semillas (Spain), Rete Semi Rurali (Italy), Sciences Citoyennes (France), Sociedad Española para la Agricultura Ecológica, SEAE (IFOAM EU member, Spain), Testbiotech (Germany)

Contact:
Spain: Luís Ferreirim Greenpeace España, Tel+34 91 444 14 00,
Víctor Gonzálvez – Director, Sociedad Española de Agricultura Ecológica (SEAE), vgonzalvez@agroecologia.net [1], Tel: +34 627343399,

Portugal: Margarida Silva, Plataforma Transgénicos Fora, info@stopogm.net [2], Tel: +351-917301025
Jaime Manuel Carvalho Ferreira direccao@agrobio.pt [3], Presidente da Direcção, Associação Portuguesa de Agricultura Biológica, tel. 00351 213 641 354;

Germany: Christoph Then, Testbiotech, Tel + 49 15154638040, info@testbiotech.org [4]

Further information: Oxitec application for trials [5]
More information on Oxitec technology [6]
Previous media release [7]

Attachment | Size
---|---
[No Release of Oxitec GE Olive Flies.pdf](https://www.testbiotech.org/sites/default/files/No%20Release%20of%20Oxitec%20GE%20Olive%20Flies_0.pdf) | 254.08 KB


Links
[1] mailto:vgonzalvez@agroecologia.net
[2] mailto:info@stopogm.net
[3] mailto:direccao@agrobio.pt
[4] mailto:info@testbiotech.org