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In fact, it isn’t answering anyone’s questions. “We have raised a lot of questions with the government,” says Emmanuel Lesprit from the French Seed Union, which represents seed companies and plant breeders. “We have no answers.”

A variety of opinions
Kastler says the decision applies to “random mutagenesis in vitro”, that is, mutating cells rather than working “in vivo” on whole plants, and the only examples he knows of are herbicide-resistant crops.

Petra Jorasch of Euroseeds in Brussels, a non-profit organisation representing people who grow and sell seeds in Europe, disagrees. She doesn’t think the ruling applies only to in vitro mutagenesis, and might not even be limited to varieties introduced after 2001. In any case, she says, there is no clear dividing line between in vivo and in vitro mutagenesis.

Martin Wasmer at the Centre for Ethics and Law in the Life Sciences in Hannover, Germany, says even the in vitro definition encompasses at least several hundred varieties, and would apply to ornamental plants as well as those grown for food.

In theory it would not only be illegal for farmers to grow withdrawn varieties, it would also be illegal for products made from them to be sold in France, even if they are grown elsewhere in the EU or outside the EU. It isn’t clear if France can or will attempt to enforce this.

Implementing the ruling means identifying which varieties were created by the methods in question. The trouble with this, says Jorasch, is the national and EU-wide catalogues of approved non-GM plant varieties don’t record how those varieties were created.

French authorities would have to track down the breeders of each variety and ask them, she says. And the breeders might not even know, because they often use plants created by other groups as a starting point.

What’s more, even if these varieties could be identified, there is no way for retailers in France to know if food they import from other countries derives from the varieties in question. And if shops in France stop selling some of these products, they will be breaching EU rules. “It would violate the treaties of the EU on the free movements of goods,” says Wasmer.

The matter has been referred to France’s High Council for Biotechnology, an independent body which has to advise the French government by August. The government then has until November to implement the decision.

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There is also confusion over what happens if plant varieties were created by natural mutations, or that there is usually no way to tell the European Commission said there is usually no way to tell from the DNA sequence of an organism whether it has been created by natural mutations, mutagenesis or gene editing.

They want the regulatory regime to focus on the effect of any genetic modifications rather than on the method used to make those modifications. But Wasmer thinks it will take at least five years to change the directive if it does happen. In the meantime, he expects anti-GM organisations in other EU countries to bring similar cases to the courts, meaning more countries could soon face the same conundrum as France.

The UK probably won’t be one of them – Brexit means it is likely to diverge from EU legislation. “There’s an opportunity for the UK to do something different,” says Napier. “But the country will have to tread carefully because of the issues around trade.”