

Questions and Answers about GMOs in seeds

What is the EU seeds legislation?

The Directives on the marketing of agricultural and vegetable seeds aim to improve the quality of seeds (e.g. identity and purity of the variety) marketed in the EU. Specific requirements are set out on sealing, labelling and documentation.

If technical amendments and updates of the Directives are necessary, the Commission is assisted by Member States in adopting measures through the Standing Committee on Seeds and Propagating Material for Agriculture, Horticulture and Forestry. A Management Committee composed of representatives of the Member States assists the Commission in those cases. A Commission proposal can be rejected by qualified majority. The Commission can despite this adopt the proposed law but has to get an opinion of Council. If Council rejects it as well with qualified majority the law is annulled. The European Parliament has a right of information.

Is there separate legislation on GM seeds?

Yes there is. All GM seed varieties have to be approved and authorised in the EU for cultivation under Directive 2001/18 on the deliberate release into the environment of genetically modified organisms or under the Regulation 1829/2003 on genetically modified food and feed. Authorisation is only granted after a positive scientific assessment has concluded that no unacceptable risks to the environment or human health is likely to appear. All GM seeds varieties have to be labelled as such. Also conventional seeds will have to be labelled above a certain minuscule threshold as containing GM seeds. This threshold remains to be set. The Commission will first propose to the Regulatory Committee established under Directive 2001/18 composed of Member States representatives such thresholds in the forthcoming months for approval with qualified majority.

Why is there a need to set thresholds for GM-impurities in conventional seeds?

Legislation on seeds has always recognised that a 100% purity is not possible, which is why thresholds have been set which take into account the fact that plants are grown in an open field, that cross-pollination is a natural phenomenon and that one cannot control wind and insects which contribute to this. For example, certified soya beans may have up to 1% impurities of another soy variety. Impurities can arrive through cross-pollination, dissemination of volunteers and at harvest, transport and storage.

Thresholds in seeds also exist for the presence of harmful organisms, e.g. mushrooms.

Genetic modifications have been introduced in beet, maize, potato, swede rape, soya bean, cotton, chicory and tomato world-wide. Only GM-maize, GM-swede rape, GM-soya bean and GM-chicory are currently authorised in the EU. Requests for authorisation for GM-potatoes, GM-beet and GM-cotton have been made.

The EU is also heavily dependent on imports of conventional seeds from third countries where GM cultivation is present. About 30% maize seeds are imported, 50% soya bean seeds and 80% cotton seeds (based on data of 2002).

The experience of recent years shows that the “adventitious” or “technically unavoidable” presence of traces of GMOs in conventional seeds has therefore become inevitable since it is an existing reality.

But although the seed directives lay down minimum conditions in respect of the seed harvested and intended to be marketed, in particular in respect of varietal purity, they do not include specific requirements regarding the presence of genetically modified seeds in seed lots of non-genetically modified varieties.

Therefore, to recognise this reality and to facilitate the marketing of seeds with traces of GM presence, it is proposed to establish de minimis thresholds for such presence of authorised GM varieties only.

The thresholds should be adapted to the reproductive system of the plants concerned, the vegetative cycle, as well as the probability of adventitious presence in the seed crop.

Conditions and requirements could also be included for other plant species, if appropriate, in the future.

What thresholds for GM-presence in conventional seeds will the Commission propose?

The proposed thresholds will be established according to the species and taking into account the reproductive systems of the plants under Directive 2001/18 and the specific seed legislation alike.

The opinion of the Scientific Committee of Plants (SCP) of 7 March 2001 http://europa.eu.int/comm/food/fs/sc/scp/outcome_gmo_en.html concerning the adventitious presence of genetically modified seed in conventional seed will be considered while establishing the thresholds proposed. The opinion has been reviewed and confirmed on 24 April 2002 and on 30 January 2003.

What is the aim of such thresholds, what is the relationship between the seed thresholds and the labelling thresholds for food and feed products?

The thresholds which will be proposed will be established at levels such that food, feed or products intended for direct processing produced from crops grown from non-genetically modified seed should have a GMO content not exceeding the 0.9% threshold adopted by Council and European Parliament and provided for by Regulation (EC) N° 1829/2003 on genetically modified food and feed and by Regulation (EC) N° 1830/2003 on traceability and labelling of GMOs".

What kind of GMOs will benefit from the thresholds proposed?

It must be stressed that only GMOs which have been assessed for their safety to human health and the environment and authorised to be cultivated will benefit from the seed thresholds.

The GM seeds present adventitiously must indeed be authorised either a) as GMOs for use in cultivation under Directive 2001/18/EC on the deliberate release into the environment of genetically modified organisms or b) the genetically modified organisms for food or feed use must be authorised to be used as seeds under Regulation (EC) N° 1829/2003 on genetically modified food and feed.

In the case of presence of traces of genetically modified seeds in seeds of a non-genetically modified variety to be used in food or feed, only GM material derived from such GM seeds used in food or feed which is authorised under Regulation (EC) N° 1829/2003 on genetically modified food and feed is tolerated.

In order to benefit from the seed thresholds, the presence of GM seeds must in addition be adventitious or technically unavoidable.

Where the threshold is exceeded or where the presence is not adventitious or technically unavoidable, the label or document of a non-genetically modified variety should state that the lot contains genetically modified seeds and should specify the unique identifier(s) of the GMO(s).

Will these thresholds be important for the co-existence of genetically modified crops with conventional and organic farming?

The Commission has adopted 23 July 2003 a Recommendation on guidelines for the development of national strategies and best practices to ensure the coexistence of genetically modified crops with conventional and organic farming.

In this Recommendation it is emphasised that co-existence refers to the ability of farmers to make a practical choice between the different types of agriculture, in compliance with the legal obligations for labelling and/or purity.

It is stated that national strategies and best practices for co-existence should refer to the legal labelling thresholds and to the applicable purity standards for food, feed and seed. The standards for food and feed have just been established under the Regulation on GM food and feed. An amendment of the seeds Directives will therefore provide the missing thresholds for seeds.