

Table 1: Immediate Impact of Proposed GE Seed Contamination Directive on European Arable Land

Just over 10% (7.6 million hectares) of European arable land is currently planted with maize or oilseed rape. Since one variety of genetically engineered (GE) oilseed rape and two varieties of GE maize already have approval for growing in the EU, all of this land could be affected by the GE Seed Contamination Directive. This table shows by country how many genetically engineered plants could be released through seed contamination across the 15 European Union countries in the next growing season if the proposed thresholds for seed contamination in maize (0.5%) and oilseed rape (0.3%) are adopted.

6,850 million unregulated GE plants could be released across Europe. If planted together this many GE plants would represent a cumulative area of 32,091 hectares or 321km². Put another way that is equivalent to planting an area about twice the size of Brussels or covering 45,844 football pitches.

Crop areas and number of GE plants that would be growing in the EU at the proposed levels of contamination for GE seed (data for 2000 unless stated)																
	Total EU ⁱ	Belgium	Denmark	Germany	Greece	Spain	France	Ireland	Italy	Luxembourg	Netherlands	Austria	Portugal	Finland	Sweden	UK
Oilseed rape area (thousand hectares)	3 035	9	99	1 096	n/l	n/a	1 240	2	44	n/l	1	52	n/l	53	48	392
No. of hectares GE at 0.3% contamination	9 110	27	297	3 290			3 720	6	132		3	156		159	144	1 176
Plants per hectare = 500,000																
GE plants (millions)	4 550	13.5	149	1 640			1 860	3.00	66.0		1.50	78.0		79.5	72.0	588
Grain maize area (thousand hectares)	4 300	36	n/l	361	225	425	1 83	n/l	1 063	n/l	20	164	172	n/l	n/l	n/l
No. of hectares GE at 0.5 % contamination	21 500	180		1 810	1 130	2 130	9 170		5 320		100	820	860			
Plants per hectare = 100,000																
GE plants (millions)	2 150	18		181	113	213	917		532		10.0	82.0	86.0			
Silage/forage maize area (thousand hectares)	296	166 ⁱⁱ	1.78 ⁱⁱⁱ	n/a	n/a	n/a	n/a	13 ^{iv}	n/a	11.1 ^v	n/a	n/a	n/a	n/a	n/a	104 ^{vi}
No. of hectares GE at 0.5 % contamination	1 481	832	8.91			n/a	n/a	65		55.3						521
Plants per hectare = 100,000																
GE plants (millions)	148	83.2	0.891					6.50		5.53						52.1

Notes

n/a = data not available;
n/l = country not listed as growing that crop.

A FIFA-standard football pitch = 0.7 hectares

1km² = 100ha

Calculated data are given to three significant figures, whilst crop area data are given to the nearest 1000ha, or to three significant figures if below 100,000 hectares.

Data sources

Crop areas

Table 4.1.1.3 (grain maize), Table 4.4.1.1 (rapeseed), European Union, Directorate-General for Agriculture. *Agriculture in the European Union: Statistical and economic information 2001*. (Jan 2002)
http://europa.eu.int/comm/agriculture/agrista/2001/table_en/index.htm

Data for silage/forage maize are not given in the EU statistics. Data for this type of maize are reported for those countries where readily available from national statistics and, as such, are likely to be an underestimate of the EU acreage of silage/forage maize.

No. plants per hectare

Figures are for mid-range target established plant populations in the UK. The figure for silage maize is assumed to be the same as grain maize. Supplied by ADAS, UK, personal communication.

Footnotes

- i Totals for the 15 member states of the European Union (as of 1995).
- ii National Statistics Bureau, Belgium, <http://statbel.fgov.be>. Data for 2001
- iii Danish Directorate for Food, Fisheries and Agro Business, Ministry of Food, Agriculture and Fisheries. Data for 2001.
- iv Teagasc: Irish Agriculture and Food Development Authority. http://www.teagasc.ie/publications/2002/annualreport2000/annualreport2000_3.htm. Data for 2000
- v Service d'Economie Rural, Ministry of Agriculture, Luxembourg. Maize total. A small proportion of this may be grain maize but this does not affect the total number of plants.
- vi UK DEFRA, Agricultural and Horticultural Census, June 2001. Data for June 2000 excl. Scotland. http://www.defra.gov.uk/esg/work_hm/Notices/june_uk.pdf