TITLE	TYPE OF STUDY	COMMENTS
Brookes G. and Barfoot P. (2003). Co-existence of GM and non GM crops: case study of maize grown in Spain. Proceedings of the 1st European conference on the coexistence of GM crops with conventional and organic crops, GMCC-O3, Denmark, November 2003.	Discussion and review of field data	Case study of maize grown in Spain.
Brookes G, Barfoot P, Melé E, Messeguer J, Benetrix F, Bloc D et al (2004) Genetically modified maize: pollen movement and crop co-existence. PG Economics, Dorchester	Review of gene flow and coexistence studies	
Della Porta, G., D. Ederle, et al. (2008). "Maize pollen mediated gene flow in the Po valley (Italy): Source-recipient distance and effect of flowering time." European Journal of Agronomy 28(3): 255-265.	Experimental Field study	(1) the 0.9% cross-fertilization threshold was reached within, on average, 10 m; (2) the influence of wind was minor compared to distance between pollen source and recipient; (3) buffer maize plants that shed non source pollen, rather than fallow land, were the most efficient barrier against cross-fertilization.
Demont M, Tollens E (2004) First impact of biotechnology in the EU: Bt maize adoption in Spain. Ann. Appl. Biol. 145:197–207 ??	Economical study of Bt maize cultivation	Case study on Spain
Demont, M., W. Daems, et al. (2008). "Regulating coexistence in Europe: Beware of the domino-effect!" Ecological Economics 64(4): 683-689. ?	Economical study of different coexistence rules alternatives	rigid coexistence rules, such as large distance requirements, may impose a severe burden on GM crop production in Europe.
Messeguer J, Ballester J, Peñas G, Olivar J, Alcalde E, Melé E (2003) Evaluation of gene flow in a commercial field of maize. In: Boelt B (ed) Proceedings of the GMCC-03—1st European Conference on Co-existence of Genetically Modified Crops with Conventional and Organic Crops, Helsingør, 13–14 November 2003, 220 pp	Experimental Field study with GM maize	Gene flow rate decrease dramatically with the distance in the initial meters from the transgenic crop but a basal level remains at longer distances
Messeguer, J., G. Peñas, et al. (2006). "Pollen-mediated gene flow in maize in real situations of coexistence." Plant Biotechnology Journal 4(6): 633-645.	Real farming conditions study	a security distance between transgenic and conventional fields of about 20 m should be sufficient to maintain the adventitious presence of genetically modified organisms as a result

		of pollen flow below the 0.9% threshold in the total yield of the field.
Ortega Molina J. (2006). The Spanish experience with co-existence after 8 years of cultivation of GM maize. Proceedings of the Co-existence of GM, conventional and organic crops, Freedom of Choice Conference, Vienna, April 2006.	Field trial data with diverse situations	Scientific base for the recommendations on coexistence in Spain
Weber, W. E., T. Bringezu, et al. (2007). "Coexistence Between GM and Non-GM Maize Crops - Tested in 2004 at the Field Scale Level (Erprobungsanbau 2004)." Journal of Agronomy and Crop Science 193(2): 79-92.	Experimental Field study: various fields.	Levels of GM DNA in harvested grain resulting from outcrossing can be managed to levels below 0.9 % by simply planting 20 m of conventional maize as a pollen barrier between adjacent fields.

France, 2006:
GM Maize in the Field: Conclusive Results
www.agpm.com/en/iso_album/technical_results_btmaize_2006.pdf

- ***"[…] PCR analyses showed cross-fertilisation rates […] with a maximum of 0.4 % for plots located at a maximum point for cross-fertilisation (downwind and flowering at the same time). Not one of the plots studied went above the 0.9 % limit set by regulations for labelling. These new data provided further evidence showing that rules on coexistence are effective […]"***

Germany, 2006:
Coexistence Between GM and Non-GM Maize Crops – Tested in 2004 at the Field Scale Level
www.blackwell-synergy.com/doi/pdf/10.1111/j.1439-037X.2006.00248.x
"[…] the data indicate that coexistence of GM and conventional maize is possible under real-life large-scale agronomical conditions. Levels of GM DNA in harvested grain resulting from outcrossing can be managed to levels below 0.9% by simply planting 20 m of conventional maize as a pollen barrier between adjacent fields."

Germany, 2007
Outcrossing behavior of Bt maize in exact field trials and under production conditions (in German) www.landwirtschaft.sachsen.de/lfl/publikationen/download/3226_1.pdf

- ***"[…] In no case, GMO contents above the labeling threshold of 0.9% were detected in the harvested samples. At a distance of 25m, levels of 0.5% were found.. […]***

Husken, A., Ammann, K., Messeguer, J., Papa, R., Robson, P., Schiemann, J., Squire, G., Stamp, P., Sweet, J. and Wilhelm, R. (2007) A major European synthesis of data on pollen and seed mediated gene flow in maize in the SIGMEA project. In *Third International Conference on Coexistence between Genetically Modified (GM) and non-GM based Agricultural Supply Chains*, Vol. Book of Abstracts, pp 53-56. Seville (Spain)
Altogether, the evaluated datasets indicate that a 20-50 m separation distance is enough to maintain the labeling threshold below 0.9%. In certain cases, where there are particular spatial conditions and agricultural practices (e.g. small scale production systems, average field size smaller than one hectare and/or long and narrow fields), the separation distance may have to be extended.

Leprince-Benetrix F. 2008. Mais Bt. Les premier resultats de l'observatoire 2007 de la coexistence. Yvoir, 14 Janvier 2008.

- **Good Agricultural Practices followed included**
  - **50 meters of isolation distances or**
  - **24 border rows of conventional maize (same earliness as the Bt field) in case isolation is inferior to 25 meters.**
  - **A new survey is led on commercial fields to test the efficiency of strengthened coexistence rules.**
  - **75% of the 66 samples analysed in conventional fields show results below 0.1% (Limit of Quantification).**

- **No result exceeds 0.5 (only 3 samples between 0.3 and 0.5%), even in maximized conditions of cross pollination.**

Portugal, 2007
Coexistence between genetically modified, conventional and organic crops. Status Report for 2006 in http://www.dgadr.pt/

- ***"[…] Laboratory results indicated that the adventitious presence of GMO in all of the sampled fields was below of the legal labelling threshold (0.9%). Ten of the samples turned out negative to the presence of GMO, and eight samples presented GMO values equal to or below 0.5% […]"***

Olivier Sanvido, Franco Widner, Michael Winzeler and Franz Bigler.
Scientific criteria for the evaluation of cross-fertilization data to define isolation distances for transgenic miaze cultivation. Spain, Seville – Nov 2007 – Book of Abstracts GMCC-07, pages 97-100

- **This is using a review of existing cross-fertilization studies in maize.**
- **The criteria were used to define isolation distances based on scientific data to keep GM-inputs in the final product well below the 0.9% threshold defined by EU legislation. Isolation distances of 20 m for silage and 50 m for grain maize, respectively, are proposed.**

Spain, 2006:
Pollen-mediated gene flow in maize in real situations of coexistence
www.blackwell-synergy.com/doi/pdf/10.1111/j.1467-7652.2006.00207.x

- ***"[…] a security distance between transgenic and conventional fields of about 20 m should be sufficient to maintain the adventitious presence of genetically modified organisms as a result of pollen flow below the 0.9% threshold in the total yield of the field […]"***

United Kingdom, 2007
A study of crop-to-crop gene flow using farm scale sites of fodder maize (Zea mays L.) in the UK.
www.springerlink.com/content/w1627886480r1xr8/?p=c20289b2f78b46a1ac57e1d23e8cda25&pi=6

- ***"[…] The results of the performed analysis showed that an isolation distance of 20 m for silage maize, and 50 m for grain maize, respectively, is sufficient to keep GM-inputs from cross-fertilization below an arbitrary level of 0.5% at the border of a non-GM maize field. […]"***

Switzerland, 2006:
Simulation of transgenic pollen dispersal by use of different grain colour maize
www.agrisite.de/doc/ge_img/pollen-swiss.pdf

- ***"[...] In all field experiments variation in cross-pollination was high at close distance to the pollen donor but the rates decreased rapidly with distance and beyond 15 m they were more or less below 0.9 % in all experiments. The results of this Swiss study supported and complemented the results of international studies. [...]"***