

GMO-FREE REGIONS NETWORK Conference - Workshop “Seed purity and measures to ensure it”

Testing conventional seeds on GMO - Overview of Methods used in Europe

Abstract

In Europe, each year several thousands of conventional seed lots are tested for presence of GM seeds by the official seed testing laboratories of EU Member States. In the EU so far only 1 GMO (MON810 maize) is authorized for cultivation, whereas 59 GMOs are currently approved for import and marketing as food/feed. Any approved GMO requires availability of certified reference materials and event-specific PCR methods for identification and quantification, regardless of its intended use (food, feed, cultivation). A Commission Recommendation (787/2004/EC) provides specific guidance for sampling protocols also for testing seed lots for GMO presence. However, audits of the Commissions' Food and Veterinarian Office (FVO) showed that sampling plans between Member States vary in sample size and detection limit of the analysis. In contrast to GMO food/feed legislation, no labelling threshold has been established for adventitious or technically unavoidable traces of authorized GMOs in seed lots. In case of findings of presence of GMO seeds, some countries apply zero tolerance, some apply thresholds with specific enforcement rules according to the authorization status of the GMO. Harmonized and standardized sampling plans, screening strategies and methods for detection as well setting of a legal basis for GMO testing of conventional seeds lots may contribute to ensure seed purity.