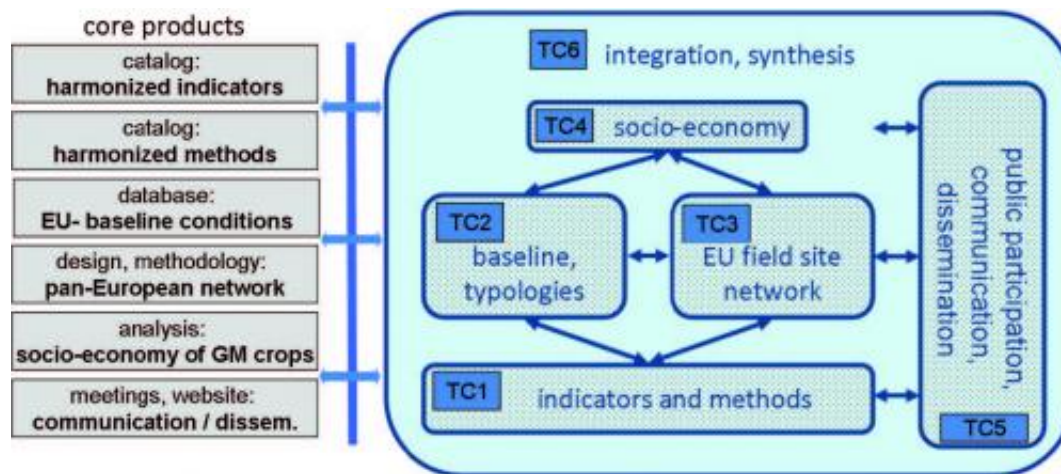


# Genetically Modified Organisms (GMO) need to be assessed through systematic networks

October 18 2012



This is the proposed framework for ENSyGMO. Credit: Graef F et al.

In Europe there are many concerns about adverse environmental effects of genetically modified (GM) crops, and the opinions on the outcomes of environmental risk assessments (ERA) differ largely. GM crop safety testing and studies on the standardisation of impact assessments of releases are insufficiently developed. Therefore a framework was published in the open access journal [BioRisk](#), which aims at improving the European regulatory/legal system.

Specific elements of the network are a) methodologies for both indicator and field site selection for GM crop ERA and PMEM, b) an EU-wide typology of agro-environments, c) a pan-European field testing network

using [GM crops](#), d) specific hypotheses on GM crop effects, and e) state-of-the-art sampling, statistics and modelling approaches. Involving actors from various sectors the network will address [public concerns](#) and create confidence in the ENSyGMO results.



GMO corn field between Timisoara (Temeswar) and Sannicolau Mare in Rumania. (For reasons of data protection, signs have been modified so that they can't be recognized.) Credit: Tilo Arnhold/UFZ

"Assessing GMOs on the basis of separate criteria may yield misleading results, with [negative consequences](#) for both nature and mankind. The impact of GMO should be analysed using integrated approaches and methods at various scales. We are convinced that the proposed assessment framework has the potential to set up a new standard in regulation of the usage of GMO" commented Dr Josef Settele from Helmholtz Center for Environmental Research – UFZ, Halle and Editor-in-Chief of *BioRisk*.

**More information:** Graef F, Römbke J, Binimelis R, Myhr AI, Hilbeck A, Breckling B, Dalgaard T, Stachow U, Catacora-Vargas G, Bøhn T, Quist D, Darvas B, Dudel G, Oehen B, Meyer H, Henle K, Wynne B, Metzger MJ, Knäbe S, Settele J, Székács A, Wurbs A, Bernard J, Murphy-Bokern D, Buiatti M, Giovannetti M, Debeljak M, Andersen E, Paetz A, Dzeroski S, Tappeser B, van Gestel CAM, Wosniok W, Séralini G-E, Aslaksen I, Pesch R, Maly S, Werner A (2012) A framework for a European network for a systematic environmental impact assessment of genetically modified organisms (GMO). *BioRisk* 7: 73. [doi: 10.3897/biorisk.7.1969](https://doi.org/10.3897/biorisk.7.1969)

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