## Growing movement against allowing mutagenesis and cell fusion hybrid seeds in organic agriculture

It is spring planting time for farms, and, if hybrid seeds are being planted, chances are some might be genetically engineered (GE) and technically genetically modified organisms (GMOs), according to a growing movement in organic agriculture.

In organic farming, transgenic (between different biological families) GE is banned, but cisgenic (within the same species family) GE used in the cell fusion process is permitted under USDA organic regulations. By international organic certification standards, cell fusion is classified as genetic engineering, but these standards established by The International Federation of Organic Agricultural Movements (IFOAM) are being ignored by the United States, Europe and other countries.

In April 2014, the Organic Consumers Association (OCA), representing more than 850,000 members, including several thousand businesses in the natural foods and organic marketplace, launched a consumer campaign to ban cell fusion mutagenesis in the USDA NOP organic production standards. "Like genetic engineering, mutagenesis can cause dramatic shifts in genetically determined traits, producing unknown toxins or allergens. 'Wheat Belly' author Dr. William Davis blames mutagenesis, which is used to produce modern wheat — including organically grown wheat — for increases in wheat allergies and intolerances," states the OCA.

"Cell-fusion is a controversial topic and IFOAM would like to ban it from organics completely, as they consider it a form of GM. But many of us in the organic community know that that would seriously compromise the ability of organic farmers to grow commercial crops of several brassicas," says John Navazio, senior scientist with the Organic Seed Alliance and a Washington State University Extension Specialist in Organic Seed.

Overall, the debate over whether cell fusion and mutagenesis in seed production are GE has caused confusion and conflicting answers in the organic community. USDA's National Organic Program and its European counterpart, EFSA, cite the practices as "traditional" and excluded from organic standards, but IFOAM identifies these same laboratory processes as DNA GE and bans them from organic production.

John Navasio believes for now that both a ban on mutagenesis and the continued use of cell fusion in organic seed production are a dead end. "Without high-quality commercial alternatives in the form of organically bred and developed crop varieties, it will be very difficult for the NOSB of the USDA or even IFOAM in Europe to ban this technology that crept into organics while everyone was taking a nap and relying on the big boys in the seed industry to take care of our seed needs," he says.

Read the full, original article: Organic Mutagenic/Cell Fusion Hybrid Seeds are Genetically Engineered