

Conformity of Lebanese Organic crops to international guidelines

La conformité des récoltes Bio aux normes internationales

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Growing concerns over excessive pesticides use and their effects on human health and environment, have led to the move from conventional to organic farming, seeking healthy products and also higher nutritional values. Based on Codex Alimentarius definition, Organic farming is a holistic approach for an integrated farming system that strives for sustainability, the enhancement of soil fertility and biological diversity whilst, with rare exceptions, prohibiting synthetic pesticides, antibiotics, synthetic fertilizers, genetically modified organisms, and growth hormones.

Considering these crucial criteria to be fulfilled by farmers, a concern turns around the credibility of organic products in Lebanon, knowing that 1079 hectares are dedicated for the organic farming as reported by Agence Bio on 2016. In addition, the traceability of information regarding the organic farming covering the whole path “from farm to fork” is to be assured and controlled for certification purposes by a third party organization. Worth to note that 2 ministerial decisions are already issued in 2011 and 2012 in order to regularize the organic farming sector and the role of certification organization in monitoring and certification of organic products.

A study was done on 2018 on the conformity of certain Lebanese crops to organic product specifications. For this purpose, 63 organic samples, claimed as «organic products», were collected from Lebanese market for 3 types of crops grapes, orange and cucumber. Conventional products from same type of crops were also analyzed for comparison purpose. 73 types of pesticides residues were tested using a reliable analytical method.

To complete the full scheme about organic farming in Lebanon, a questionnaire relevant to good agriculture practice and requirement for organic farming was administered to farmers in order to collect data relevant about the fulfillment and conformity of farming process according to guidelines.

The results showed that 52.38% of organic samples contained pesticide residues from which 15% exceeds maximal residual limits of codex and European Union. While 73.33% of conventional samples contained pesticides from which 18.18% exceeds permissible limits. Worth to note, that some of the claimed organic crops were contaminated by more than one pesticides residues

Unfortunately, only 27% of farmers were willing to cooperate and respond to questionnaire. Data collected demonstrates that 57% of farmers are using organic regulations in their practices which was mostly interpreted as more than 80% of organic farmers are university graduate. Collected organic products were produced by farmers whom 43% are certified as organic farming, while 71% are using animal manure for soil fertilization, 64% are following manual method to remove herbs.

This results highlights the need to clarify the concept of organic farming, implement a continuous monitoring program not only for end products as crops but also to sediment and soil to make sure that they are conform to organic farming guidelines and requirements. In addition, the concerned authorities should stress on the transparency , competence and professionalism of certification body in Lebanon, especially that the available one are working on behalf on a foreign certification body and thus due to lack of accreditation system which authorize and control the work of certification bodies in Lebanon.