



International Conference on Toxicology and Risk Assessment

March 20-21, 2019 Frankfurt, Germany

Agrarian and Forestry Evolution Chemical Evolution Human Evolution

P. Vila-Lameiro* and A. Conde-Fernández

Department of Agroforestry Engineering, High Polytechnic Engineering School in Lugo, University of Santiago de Compostela, Spain

The humanity began to practice agriculture 10,000 years ago and this practice represented the origin of the first civilizations. In those times there is no Scientific knowledge or productive processes like the current ones. The evils come from the deities, demons and mystical creatures. But besides, part of the solutions found are by luck, chance and finally, observation. It is in the nineteenth century when natural processes that govern the world begin to be understood. From there the chemistry of the alchemy are separated, the theory of evolution emerges, also the first major chemical production companies, industrial processes, etc. In these beginnings, the products are difficult to obtain, only available those of plant origin, inorganic or heavy metals, derivatives of coal or petroleum. But these products have a series of defects or inconveniences that will provide the future evolution of these substances:

- Very toxic
- Little or nothing effective
- Lack of selectivity
- Low availability and High price

As of this initial moment of industrialization of the processes of production of fertilizers, a period of strong product development pressure on phytosanitary products begins, focusing on effectiveness, selectivity and toxicity as factors or problems to solve.

There emerged multiple focuses of progress and improvement, with new ideas, new approaches to the use of agrochemicals with Integrated Pest Control. This implies setting priorities for use by relegating the chemicals as a last resort to the appearance of biological treatments as an alternative, which will be come part of the business of chemical companies or the development of genetic engineering applied to the agrarian and forestry sector.

Nowadays, it is essential remark that the use of phytosanitary devices is increasingly suffering from more legal and regulatory restrictions that will further force their evolution, following the strategies described, even, as can be seen in the current markets with increasing frequency and importance of eco-design.

Biography:

Pablo Vila Lameiro (Lugo, 1973), Ph Doctor in Forestry Engineering from Univ. Santiago de Compostela (2003), Forestry Technical Engineer (1995) and Forestry Engineer (1998), has his research activity focused on the study of the technological properties of timber and its derivative products, as well as on the technological transfer of the results to the exploitation industries of timber products (sawing, tonnage, wineries, agrarian industries,...). He has directed 3 doctoral theses, published more than 40 articles of impact, accumulated more than 300 appointments, directed and participated in 32 research and transfer projects, in a Network of strategic research of the Campus Terra (Igsea) in the Univ. of Santiago and activities of scientific dissemination, promotion of the social image of the University, carrying out technical advice to different social groups.