"ALIMENTOS PT.ON.DATA" - INFORMATION MANAGEMENT SYSTEM FOR THE ANALYTICAL DATA OF FOOD CHAIN OFFICIAL CONTROL

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BACKGROUND

According to Article 33 of the Regulation (EC) 178/2002[1], Member States shall take the necessary measures to enable the transmission to EFSA of the data they collect in the fields of (a) food consumption and the exposure of individuals to risks related to the consumption of food; (b) incidence and prevalence of biological risk; (c) contaminants in food and feed; (d) residues. In addition, specific EU legislation on data collection exists for specific data collection domains, namely, pesticides, contaminants and zoonoses and zoonotic agents, specifying that the data from official control should be reported to EFSA. According to EFSA mission under Article 36 of the above mentioned regulation, the development and implementation of joint projects for promoting European networking is foreseen. Within this task, Portugal has developed in 2011, a national information management system "alimentos PT.ON.DATA" for chemical contaminants and is currently upgrading the system for food additives, pesticide residues, zoonotic agents and residues of veterinary medicinal products.

OBJECTIVE

To extend and upgrade the national information management system for the analytical data of the food and feed chain official control "alimentos PT.ON.DATA", to include all the data from contaminants, additives, pesticide residues, zoonotic agents and residues of veterinary medicinal products under the scope of the "Pilot project on the implementation of SSD2 in the frame of the electronic transmission of harmonised data collection of analytical results to EFSA".

MATERIAL AND METHODS

▪ The new "alimentos PT.ON.DATA" uses EFSA standards, Standard Sample Description (SSD) ver. 2 data model and catalogues[2], Guidance on Data Exchange (GDE) ver.2[3] and FoodEx2 food classification system[4] and is an upgrade of the system developed under article 36 project "Implementation of Electronic Transmission of Chemical Occurrence Data in Portugal", that contains a database with more than 40000 entries from official control (2009-2014) and uses SSD1, GDE1 and FoodEx1 as standards.

• The system is being built on top of the previous system, making use of many development tools from Microsoft, such as, Visual Studio 2013 for coding purposes, SQL Server for the national database, ASP.NET MVC5 framework for building web solutions and several HTML5 related tools.

• The National Health Institute Doutor Ricardo Jorge (INSA) and the General Directorate of Food and Veterinary Affairs (DGAV), responsible for data transmission, contracted with EFSA the implementation of SSD2. Afterwards, a cooperation protocol was created with other National Competent Authorities and Public Laboratories as partners of the project. All sampling record templates were harmonised in order to fulfill SSD2 requirements and now both INSA, DGAV and all involved partners are defining the new requirements and functionalities of the upgraded system.

CONCLUSIONS

EFSA standards and its support to Member States contributed to foster national IT infrastructures and to increase data quality. "alimentos PT.ON.DATA" is supporting national data electronic transmission to EFSA and will standardize and improve: i) coordination of multiannual control plan (real time sampling monitoring and execution); ii) harmonisation of sampling records; iii) risk assessment associated to diet; iv) management of the national food and feed safety system; v) definition and implementation of policies for food and feed safety.

RESULTS

The system includes functionalities for data upload, mapping and validation, create XML files, search, statistics and administration tools.
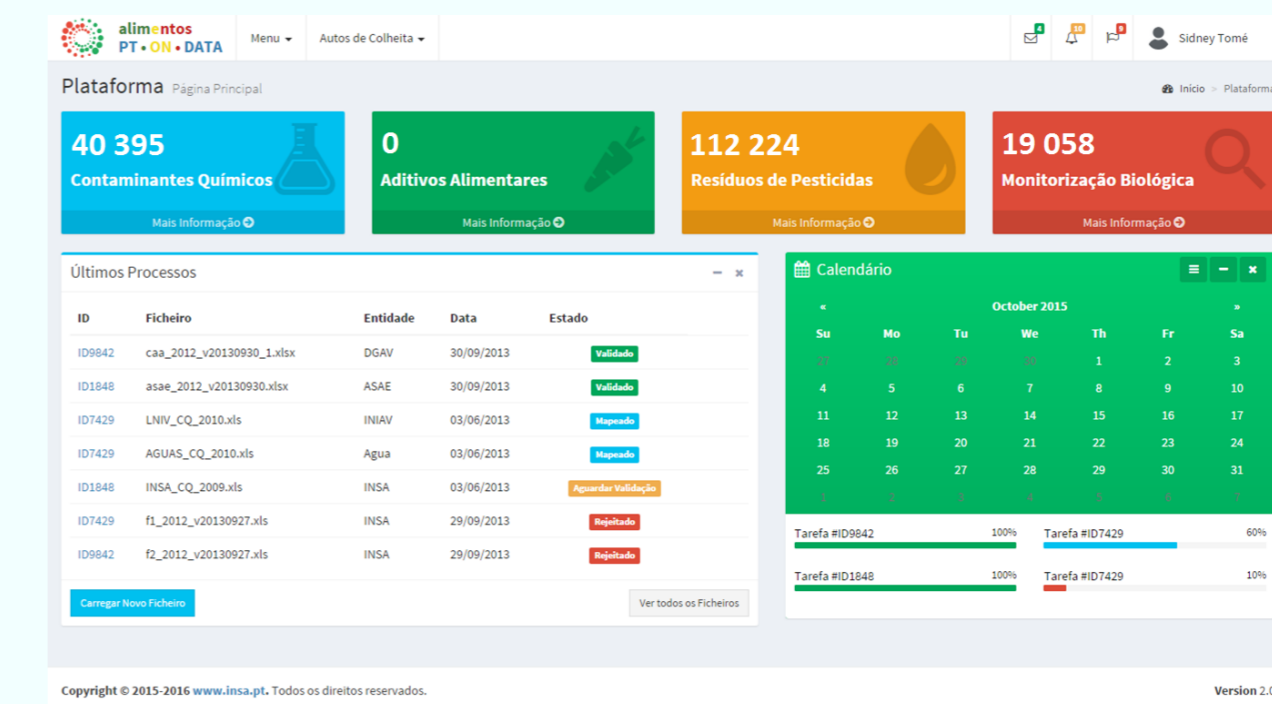
"alimentos PT.ON.DATA" contains contaminants data from 2009 – 2014, which distribution is represented in Figures 1 – 4 and pesticide residues and zoonotic agents data from 2014, as shown in Figures 5 and 6.
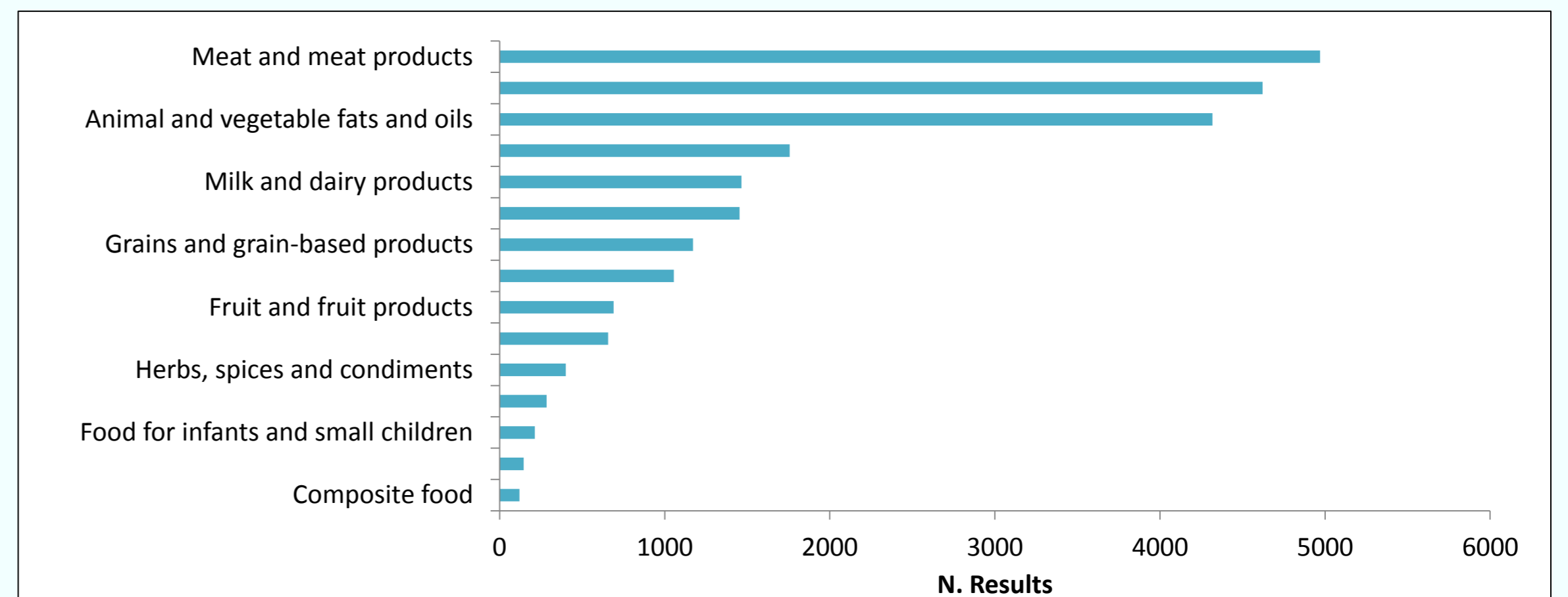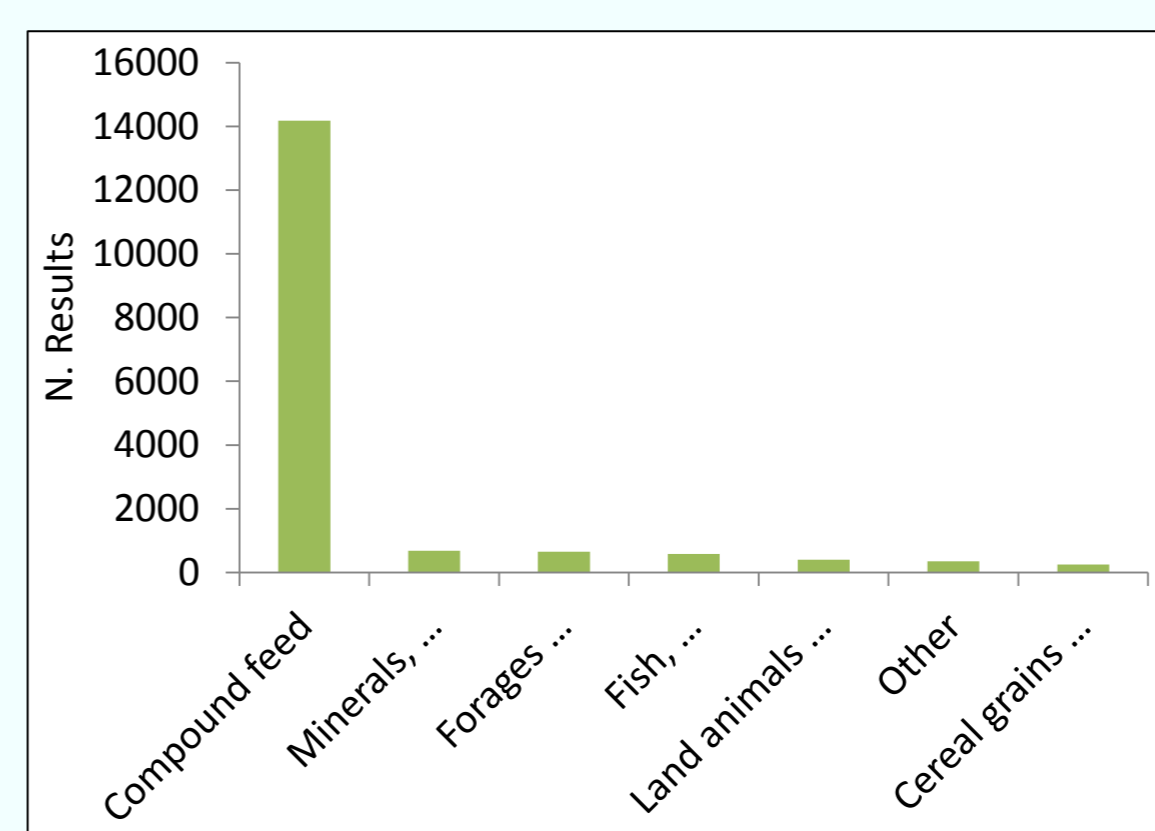

Figure 1 – Results by food category

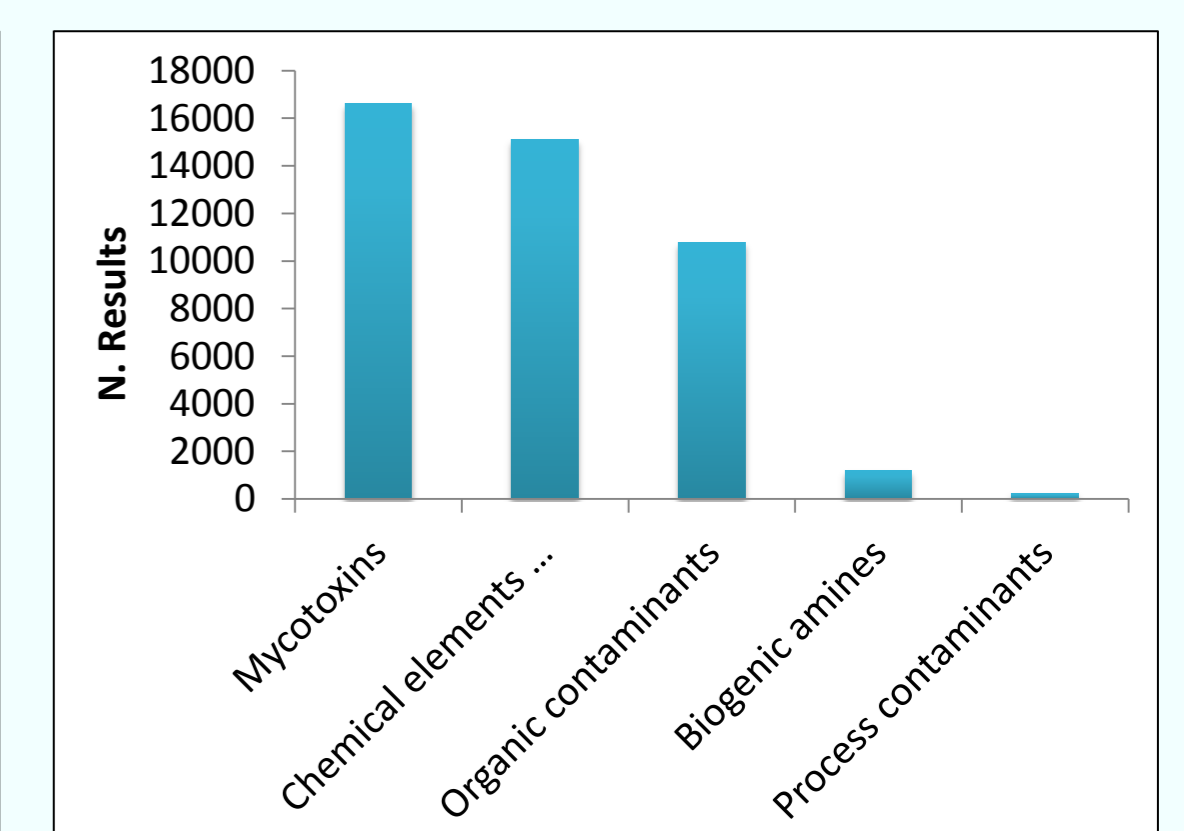Figure 2 - Results by feed category

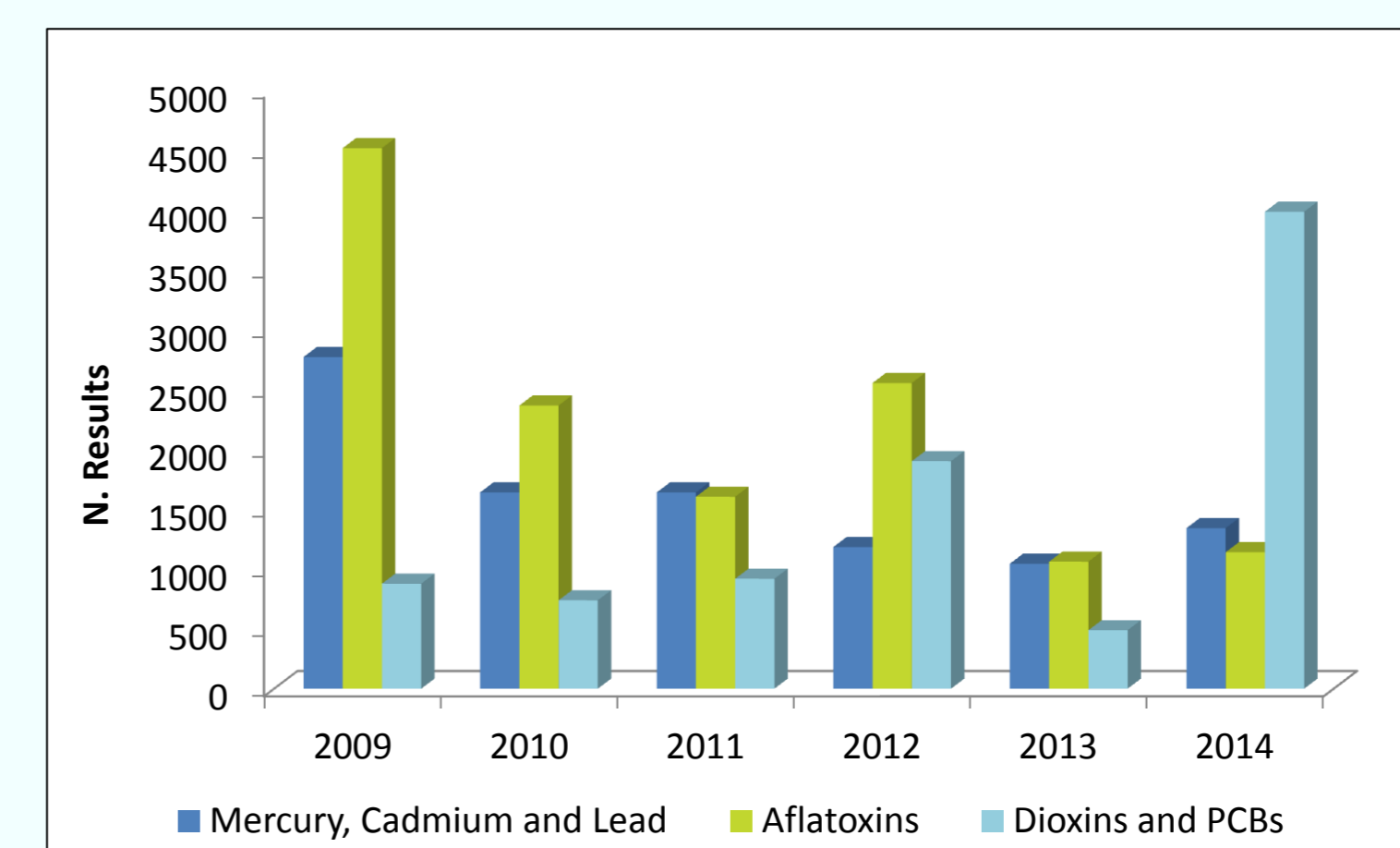
Figure 3 – Results by substance family

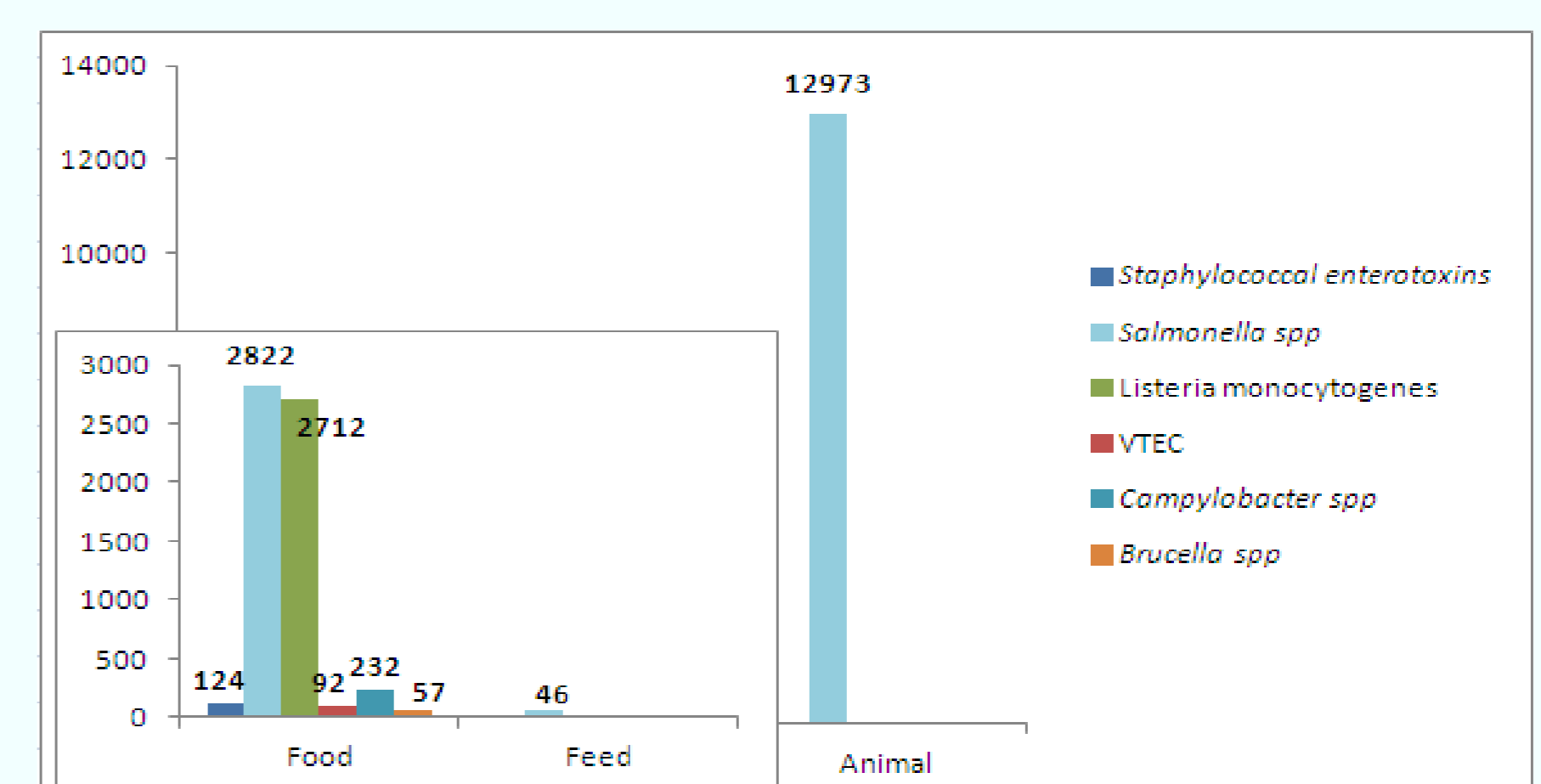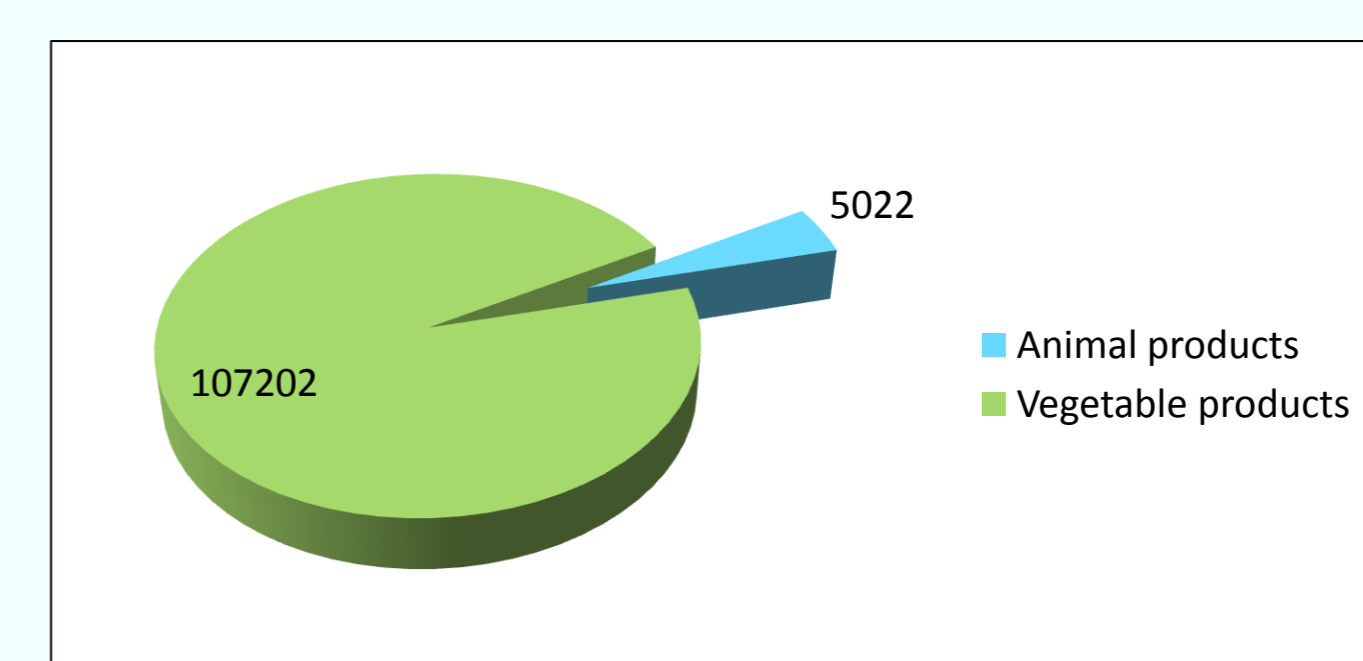Figure 4 – Chemical elements, aflatoxins and dioxins and PCBs results

Figure 5 – Zoonotic agents results

Figure 6 – Pesticide residues results

REFERENCES

[1] Regulation (EC) No 178/2002 of the European Parliament and of the Council of 28 January2002 laying down the general principles and requirements of food law, establishing the European Food Safety Authority and laying down procedures in matters of food safety. OJ L 31, 1.2.2002, p.1-24.

[2] EFSA (European Food Safety Authority), 2013. Standard Sample Description ver. 2.0. EFSA Journal 2013;11(10):3424, 114 pp., doi:10.2903/j.efsa.2013.3424.

[3] European Food Safety Authority, 2014. Guidance on Data Exchange version 2.0. EFSA Journal 2014;12(12):3945, 173 pp., doi:10.2903/j.efsa.2014.3945.

[4] European Food Safety Authority, 2015. The food classification and description system FoodEx2 (revision 2). EFSA supporting publication 2015:EN-804. 90 pp.