

QS-Animal feed primary production

Carry-over Soil –Feeding-/Foodstuff

Quality management measures in food chain emerge already in feed primary production. Cultivation system and the nutritional and pollutant inventory of grounds are very important factors which influence quality-of human and animal food and in conclusion of human and animal health.

Based on:

- Geogenic - or Immission load
- contaminated land as well as food plain influence.

With the intensification of the plant production as well:

- the technology and the mode of action ,
- as the assortment of plant protection products, pesticides/insecticides, and the fertilisers, mineral and/or. organic, altered.

From the area of the animal production, an influence takes place through:

- the use of ergotropics
- and through the entry with the excrement of feed additives (for example copper) and if necessary drug remains by oral using of therapeutic or prophylactic medical substances.

This way is essentially influenced by agriculture management factors like fertiliser, pesticides, or other entries of conditional substances. The native material content of the grounds changes, and in conclusion to that, the contamination values differs

On the basis of the storage function of ground, also pollutants, and his low regeneration capacity, the precaution principle is utmost important for another enrichment with pollutants. In order to produce healthy feed or foodstuff, the agricultural surfaces has to be clean through the management measures. Especially crop contaminations with pollutant-containing ground material has to be under special observation.

Regarding food chain, even the uptake of animals as well as the human carry-over the surveillance beginning at the primary production is necessary.

On the step of the primary production, it dependence of the contamination element and the plant especially the material which will be used. It is possible that it act as phytotoxicological agent or influence the zootechnical results positive or negativ.

In order to that, we want to analyse the ground burden values on the basis of geographical information system intergrating the data of feed and food supervision in the study region, a district area of North RhineWestphalia.

The parallel collection and evaluation of land data and food as well as feedstuff in the appropriate areas, should help to find out the possible critical points in order to derive necessary quality-securing Arrangements.

Furthermore it should be connected the execution of the feed/food observation with the ground examinations in the sense of a risk-oriented specimen collection. In the framework of the quality protection the transparently pollutant entry can be handle safer in the case that the develop system shows clear by overcoming at the critical control point that preventive measures are necessary. The main objective of the project is the transparent representation of selected material entries into the food chain and to built up the overcoming values in a landscape. The cycles will be printed out as a chart based on geographical information systems. This chart shows the main substances contamination, their values as well as their relevant factors. So, that optimal handling can be analyzed.

For the different production levels, bearings values and border crossing values are to determine at solid-growing. Critical checkpoints, should be shown with the purpose for a better risk control.

First phase:

- literature investigation and evaluation of existing information sources into the selection of suitable material cycles:
 - literature data bases (Agricola) Pubmed, etc,
 - compartment information system material ground burden Fis-StoBo
 - digital ground burden cards
 - analysis results of the official feed and food examinations
- background description and data preparation of the existing information of the selected material cycles:
 - ground analysis values, utilization data, description biotic r and abiotic influence sizes (remains behavior)
 - establishing of the examination areas and the examination methods

Second phase:

- evaluation of existing data and establishing of the assay criterions for the planned observation.
- transaction of the examinations and their evaluation
- establishing of critical checkpoints
- investigations of limits and their indicators.
- investigation from measures to the risk-control