

Species identification by NGS (Next Generation Sequencing)



Food fraud and food authenticity determination are increasingly important in the food industry. Food fraud could pose healthcare problems, as well as economic issues both for companies and consumers. The most common food frauds are related to adulteration, counterfeit, sophistication and alteration.

Nowadays, several analytical approaches can be applied for food fraud determination, based on the adulterant category. DNA-based technologies discriminate between different species of organisms, thanks to the presence in their genomes of unique and distinctive sequences.

Next Generation Sequencing (NGS), classical sequencing's latest evolution, can be used to detect multiple unknown species (untargeted search), given their presence in the reference database.

Neotron proposal

Neotron proposes NGS species identification of vegetable, animal and fish species in raw goods and complex matrices, provided they have DNA available to perform the tests. The analysis can be targeted to one, two or all the three species categories.

Results are expressed as a list at species or genus level.

