

Occurrence of polyaromatic hydrocarbons in processed fishery products

Polyaromatic hydrocarbons (PAHs) are ubiquitous organic compounds. The aquatic environment is often polluted with the presence of these compounds due to domestic effluents and then reach in phytoplankton, plant leaves, river sediments, suspended solids and worms. Ultimately it is found in all aquatic animals who eat these biota. Grilling of food may also lead to the production of PAHs owing to closeness of the meat to the heat source, which in turn, depends on the level of heating and presence of fat in the food. Epidemiological studies have unequivocally established a relationship between the occurrence of PAHs and the different types of cancer. A study made on processed fisheries products by the Fisheries College & Research Institute, Tuticorin suggests low temperature cooking, avoiding fat pyrolysis and longer and closeness of the food to the heat will help



in reducing the occurrence of polyaromatic hydrocarbons such as chrysene (CRY), dibenzanthracene (DBA) and benzopyrene (BAP) in the processed fishery products (Kannappan *et al*, *J Food Sci Technol*, 2000, 37, 596).

HACCP in fisheries

Quality assurance of export products is ensured by the government of India through its established structures of Export Inspection Council of India (EIC) and Export Inspection Agencies (EIA). There are 5 EIAs situated at Chennai, Cochin, Delhi, Kolkata and Mumbai and 61 sub-offices spread throughout the country. In fish and fishery products, the compliance of Hazard Analysis Critical Control Point (HACCP) by the processing units is checked by USFDA team. Such inspection has exposed certain shortcomings, wrong methods, lack of training, etc. Central Institute of Fisheries Technology (CIFT) with an objective of developing new technologies to improve fisheries sector and make it profitable, has test marketed packets of shelf stable, heat processed fish in flexible pouches in Middle East and Japan in collaboration with Marine Products Export Development Authority (MPEDA) and Seafood Export Authority of India (SEAI) [*Seafood Export J*, 2000, 31(11), 17].

New ornamental undershrub

Barleria cristata Linn. is an erect or diffuse undershrub covered with yellow hairs, and elliptic-oblong, acute or acuminate leaves and purple-blue, pink or white flowers. It is grown throughout India up to an altitude of 2000 m. It flowers during December to February and can be propagated through cuttings. At Tropical Botanical Gardens and Research Institute (TBGRI), Thiruvananthapuram, Kerala a variant of the plant with attractive variegated leaves has been developed from a collection of normal plants. The species which was kept under the category of flower-ornamental has been proposed to be elevated to the status of the group leaf+flower-ornamental with the newly isolated variant from the wild population (Rajvikraman *et al*, *J Econ Taxon Bot*, 2000, 24, 723).

