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P2. First survey on the presence of anisakid parasites in farmed European sea bass and gilthead sea bream produced and marketed in Sicily

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INTRODUCTION. The Scientific Opinion of EFSA (2010) outlines as the only fish free of health risks related to Anisakidae parasites the farmed salmon, if reared in floating cages or *on-shore* cages and fed by feed with no live parasites. Otherwise, the food operator shall verify, by means of procedures approved by the competent authority, that the fishery products do not represent a health risk regarding the presence of live parasites. This opinion was confirmed by several studies conducted on farmed salmon in Norway (Angot and Brasseur, 1993, *Aquaculture*, 118: 339-344; Lunestad, 2003, *J Food Prot*, 66:122-124). The absence of anisakid parasites in farmed fish has also been found for other marine fish species such as European sea bass (*Dicentrarchus labrax*) and gilthead sea bream (*Sparus aurata*) (Penalver et al., 2010 *J Food Prot*, 73:1332-1334). Currently there are low evidences on the prevalence of anisakid infestation in aquaculture fish produced and marketed in Italy. In this work, a sampling plan was carried out aimed at collecting different fish samples marketed in Sicily, to verify the presence and prevalence of anisakid parasites infestation.

MATERIALS AND METHODS. A total of 143 samples of sea bass and 110 samples of sea bream from Sicilian and Greek farms were examined: all the samples were of commercial size (over 200 g). The specimens were taken and stored refrigerated then transferred to the C.Re.N.A laboratories, where visual inspection of viscera and muscle was carried out. The negative samples were subjected to chloro-peptic digestion. The larvae found were subjected to morphological identification, through optical microscopy and molecular analysis by PCR-RFLP method.

RESULTS AND CONCLUSIONS. The survey revealed the presence of two parasites belonging to the Anisakidae family, found inside the coelomatic cavity, only in a single sample of European sea bass from a single farm located in Greece, revealing a prevalence of infestation of 1.7%. The larvae were morphologically identified as belonging to the morphotype I of the genus *Anisakis*. Molecular investigations confirmed the larvae as *Anisakis pegreffii* species. No larvae were found in the samples of gilthead sea bream examined. The present work represents the first report on the presence of anisakid parasites in European sea bass. Our findings in farmed fish can be traced back to the aquaculture policies; however the prevalence of infestation in these productive realities remains very low. Furthermore, the results of this study suggest further investigations in order to have a comprehensive risk picture.