Food microscopy of processed fruit products, marketed in the supermarkets of São Paulo, SP


Food microscopy was used in order to quantify mycelial fragments of mold and extraneous materials in fruit jams, fruit pastes and canned syrup fruits. Official Methods of Analysis (AOAC International, 1995) was applied to Howard mold counting, to Geotrichum mold counting and to the determination of extraneous materials in jams, fruit pastes and canned syrup fruits (in this determination of extraneous materials it was used the Macroanalytical Procedures Manual methodology); when necessary, the methods were adapted and/or modified. The modifications made in the adopted methods are commented on. In relation to the hygienic conditions of the sweets which were analyzed through the Howard method, it was checked that the biggest percentage of sample containing mycelial fragments of mold was the fruit pastes, followed by the jams and the canned syrup fruits. In the Geotrichum mold counting, the biggest percentage of positive samples was found in the canned syrup fruits, followed by the fruit pastes, and then, in a smaller percentage, the jams. In relation to extraneous materials, the jams and fruit pastes showed the biggest percentage of positive samples. The fruits showed a different procedure to the same kind of sweet. The methods adopted showed to be appropriate, enabling satisfactory reading of the mold counting as well as of the extraneous materials, making their use possible by food microscopy laboratories. The results which were obtained in the analysis show the need of a revision in the food legislation in force, establishing tolerance limits to the mycelial fragments (except for the Geotrichum) and to the insects fragments in the products made of fruit which studied here.

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