Abstracts

Study of Pathogen and Probiotic Microorganisms in Persian medicine drug combinations

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Abstract:
Background and purpose: By increasing the spread of Persian medicine and the consequent use of the related traditional products, the importance of reviewing the control characteristics of these drugs is further enhanced. One of the important controls is microbial control. Also, due to the fermentative nature of some of these products, probiotic microorganisms are likely to be present in traditional medicine products. Accordingly, we decided to review the microbial contamination and probiotic potential of some of these products.

Methods and Materials: In this study which performed during March 2017 to October 2018 in Shiraz-Iran, 27 different traditional medicine products were randomly purchased from Persian medicine Health Center of Shiraz. The total number of products aerobic bacteria and the total number of yeasts and fungus were counted. Also the presence or absence of pathogen microorganisms such as Staphylococcus aureus, Escherichia coli, Pseudomonas aeruginosa, Salmonella and Shigella were checked out. The method was performed by diluting the samples and then cultivating the specimens with pour plate method in an appropriate specific culture medium. To ensure the results, the microbial control method was validated. In addition, the presence or absence of Lactobacillus was also investigated in the manner described above.

Results: The results of microbial cultures showed that all 27 products studied had the least acceptable criteria for microbial content, according to the European Pharmacopoeia 2017. Six samples were identified as the products containing Lactobacillus spp.

Conclusion: The presence of Lactobacillus in such products shows the importance of further studies on the probiotic content of such traditional products as a new source for the production of probiotics, and consequently as the new functional products.

Keywords: Persian medicine, Traditional medicinal products, Microbial control, Probiotics.

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