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Editor
Ulaş ACARÖZ
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Editor's Note

The first 'International Congress on Biological and Health Sciences' was organized online and free of charge. We are very happy and proud that various health sciencerelated fields attended the congress. By this event, the distinguished and respected scientists came together to exchange ideas, develop and implement new researches and joint projects. There were 23 invited speakers from 11 different countries and also more than 400 submissions were accepted. More than 50 countries contributed to the congress. We would like to thank all participants and supporters. Hope to see you at our next congress.

Best wishes from Turkey

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Oral Presentation

Investigation of The Effects of Some Phytochemicals on *Yersinia ruckeri* and Antimicrobial Resistance

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Abstract:
In this study, it is aimed to investigate the effects of *Moringa oleifera* and *Sorbus domestica* plant extracts on bacterial disease agents *Yersinia ruckeri* in aquaculture. Morphological and biochemical properties of 2 different *Y. ruckeri* isolates were determined. Then, Real-Time PCR analysis and gene sequencing of the isolates were identified. Phytochemicals (*M. oleifera* and *S. domestica*) and antibiotics (Oxytetracycline (OX) and Enrofloxacin (ENR)) were used together in the antibiogram test of antibiotics compared to the effect status of antibiotics. Also, the effects of phytochemicals on *Y. ruckeri* growth were examined comparatively by spectrophotometrically measuring at 600 nm wavelength every 2 hours according to bacterial growth densities with 10 different groups formed on TSB medium. As a result of the study, it was observed that the isolates formed Gram negative, catalase positive, oxidase negative, mobile and typical *Y. ruckeri* colonies. After the biochemical tests performed with Microgen ID panel, 99.85% similarity was determined. The isolates overlap with the 16S rRNA gene region after sequence analysis, and 99% of the isolates were similar in phylogenetic analysis. After the antibiogram test, Oxytetracycline and Enrofloxacin antibiotics were resistant to *Y. ruckeri* but the effects of phytochemicals were less on solid medium (MHA). As a result of the measurements carried out in liquid medium (TSB), it was observed that phytochemicals such as *M. oliefera* and *S. domestica* inhibit the growth of bacteria by 40-50%. As the importance of antibiotic resistance is increasing day by day, we believe that these phytochemicals will give positive results in treatment instead of using antibiotics.

Keywords: Real-Time PCR, sequencing, antibiogram, fish diseases, phytochemical.

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