Explanation of Some Advanced Techniques in Fish Disease Diagnosis

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In recent years, due to the increase in advanced technologies, many operations related to agriculture, especially those that require immediate actions, have gone towards mechanization. Some of these operations are so important and challenging that even a small improvement will greatly have significant benefits. One of these cases is the diagnosis of fish diseases that attracted researchers' attentions in many fields, such as ecology, pathology, immunology, agriculture, environment and economy. To overcome these problems, it is necessary to look through interdisciplinary collaboration of several specialists in various disciplines, in order to consider various perspectives of the object to reach a comprehensive solution. In this study, some advanced techniques in diagnosis of fish diseases, such as expert systems, imaging and spectroscopy methods, have been considered. Future application of these methods can be a combination of the methods that provide more effective tools to diagnose and apply appropriate treatments.

Keywords: Disease diagnosis, expert systems, fishes, image processing, spectroscopy.