MOLECULAR DIAGNOSTICS IN PARASITOLOGY

Summary

Molecular biology offers a wide range of tools applicable to the identification of parasites. The development of these methods was possible due to understanding of the DNA structure and natural replication, transcription and expression mechanisms. These techniques are constantly evolving, allowing for their greater sensitivity and high throughput. It is possible to create assays operating on various taxonomic levels. This versatility is another advantage explaining the vivid interest in these methods. In many cases their superiority over conventional methods is unquestionable since DNA is not subject to stage-related or environmentally induced changes.

The aim of this article was to review the vast possibilities of molecular diagnostics in parasitology. A wide range of methods based on nucleic acid hybridization, amplification or comparison of entire molecules is described, along with information on target sequences, and examples of these methods practical application.