ABSTRACTS

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RECENT ADVANCE OF MICROBIOLOGY IN HEALTH, BIO-INDUSTRY, AGRICULTURE AND ENVIRONMENT

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International Union of Microbiological Societies

American Society for Microbiology

Indonesian Society for Lactic Acid Bacteria

Natural Products Potential for Antigene Strategy

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Abstract

In an effort to construct non-conventional bases to be used in triplex-based antigene DNA recognition strategies, many synthetic compounds have been designed and synthesized to bind the cytosine-guanine (CG) or adenine-thymine (AT) base pair. This specific DNA recognition is expected to revolutionize medicine and biotechnology in the future. On the other hand, natural medication has been more and more preferable to most people, while synthetic drugs are slowly becoming the second choice. Furthermore, Indonesia possesses a wide diversity of plants and microbes which are very potential as the source for natural compounds, predominantly in the form of secondary metabolites of the living organisms. Based on those facts, screening of natural compounds able to substitute the role of synthetic antigene agents should be interesting and promising to support research on Gene Therapy. This can be done using several approaches. Structural analysis should be valuable to do before starting other devises such as Calorimetry, Thermal DNA Denaturation Experiment and some other Spectroscopic Methods.

Key words: natural product-DNA interaction, DNA recognition.