TAMKANG FACULTY DISCOVERED NEW BACTERIUM FOR FUTURE ANTICANCER USE

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Dr. San-lang Wang, Director of Life Science Development Center in College of Sciences, newly discovered a bacterium that could deconstruct Monascus hyphae Food Industry Research and Development Institute (FIRDI) has recognized it as new variety and Dr. Wang planned to name it as "TKU001." Dr. Wang claimed that TKU001, whose patent application is being reviewed, not only can be developed into an anticancer drug in the near future, but will also benefit medical science in general in the future.

Monascus purpureus, a kind of bacterium that can be used in the production of such foods as red yeast poor meat and red rice wine, has become a popular research field in the chemical industry at present. Monascus purpureus can significantly lower triglyceride and cholesterol levels for certain individuals. Dr. Wang stated that "TKU001 could produce a variety of useful ferments however, TKU001 has been mainly applied in the deconstruction of Monascus hyphae recently in order to produce a variety of uses in hydrolysate." Therefore, TKU001 can be used not only as a resolution to antitumor medication, but also in developing new agricultural chemicals and fertilizers. Additionally, TKU001 is useful for developing natural cosmetics and skin care products in applied chemistry.

"It's very lucky to find the new bacterium, Tamkang1001" said Dr. Wang. In order to find a new bacterium to deconstruct Monascus hyphae, he spent several months in the process of curing and finally found TKU1001. Now, TKU001 is being inoculated with organic wastes, rice bran, etc for proliferation. With such materials, it divides once in every 20 minutes.

Dr. Wang earned his Ph.D. in the Department of Applied Microbiolody at Osaka Prefecture University in Japan, and recently elected as the President

of Asian Pacific Chemical Engineering Association in Taiwan in June, 2004. His major areas of research interests include applied microorganism, ferment technology, biotechnology, and environmental microorganism. Dr. Wang has devoted most of his life in developing the biological and technological industries and helped Yi-lan County Government to develop the "Yi-lan Marine Biotechnological Garden." Dr. Wang remarked: "Along the coast, Tamkang's Lan-yang campus located in Yi-lan is actually an undeveloped precious land with abundant microorganism resources. And I hope we will be able to utilize such rich natural resources to find more new bacteria to benefit the humankind in general in the future."

Dr. Wang is a very successful and productive scholar. Most recently, he received the patent for his invention of the "technique of producing purely natural deodorization particle." His research discovered that chitosan extracted from shrimp crab shell, if fermented by Monascus hyphae with tea leaves, could produce natural deodorant. Moreover, Dr. Wang indicated that instead of covering the smell as other deodorant products function, this deodorant agent is able to deconstruct peculiar odors such as fishlike smell and shoe's odor without any environmental pollution. Furthermore, this invention can be applied in keeping fresh fruit and vegetables during the period of delivery and storage.