Spicy Taste Rating of Chili Pepper and Kimchi

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***Abstract*—In order to introduce spicy taste ratings of Chili pepper(powdered) and Kimchi, many kinds of products in circulation were selected as specimens and the correlation of the sensory taste results and capsaicinoids contents were analyzed. When compared the spicy taste levels(capsaicinoids) of specimens with their sensory test results, they were found that capsaicinoids content(capsaicin and dihydrocapsaicin) and sensory test results had a high correlation (R^2) at more than 0.9 in HPLC analyzing method.**
Categorizing the pungency of the Chili pepper(powdered) into five levels best reflected the status of Chili pepper products on the market(mild hot, slight hot, medium hot, very hot, extreme hot), while the Kimchi into three levels reflected the status of Kimchi products on the market(mild hot, medium hot, very hot). capsaicinoids contents of five levels in Chili pepper(powdered) were less than 150 mg/kg, 150~300 mg/kg, 300~500 mg/kg, 500~1,000 mg/kg and more than 1,000 mg/kg. capsaicinoids contents of three levels in Kimchi were less than 4 mg/kg, 4~12 mg/kg, and more than 12 mg/kg.

***Index Terms*: spicy taste, Chili pepper (powdered), Kimchi, sensory taste, capsaicinoids (key words)**

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