

〈原 著〉

グラム陰性菌に対するピオニンとパラオキシ安息 香酸メチルエステルの併用効果について

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The Combined Bactericidal Effect of Pionin and p-Oxybenzoic Acid Methyl Ester on Gram-negative Bacteria

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Abstract

In the domain of cosmetics, p-Oxybenzoic acid methyl esters are often used as preservatives, but their effects are not satisfactory. When a small amount of Pionin (Kankhoso 201) was added to p-Oxybenzoic acid methyl ester, considerable bactericidal effects will be expected. We have explored the bactericidal effect of the combined use with Pionin on Gram-negative bacteria. As a result, the combined use of these two chemicals gave an satisfactory bactericidal effects on *E. coli* and *P. aeruginosa* when tested by a checker-board method.

In practice, various combinations of these two chemicals were mixed to four types of cosmetics (Milk-lotion, Cold-cream, Beauty-essence and Astringent-lotion) and *E. coli* or *P. aeruginosa* were contaminated to these cosmetics. Their bactericidal effects were then evaluated by a viable count in the time course. In milk-lotion and Cold-creams, the combined use showed synergic bactericidal effects on *E. coli* and *P. aeruginosa* and additive effects in Beauty-essence and Astringent-lotions.

Key words: Pionin, p-Oxybenzoic acid methyl ester, bactericidal effect, Gram-negative bacteria.