
 Communication to the Editor

 On the Free Amino Acids in the Dermatophytes¹⁾

During studies on the chemical compositions of pathogenic fungi, we obtained a considerable amount of amino acids in a free state.

A colony of *Tricophyton asteroides* grown on Sabouraud's broth contained several amino acids, such as glycine, alanine, valine, and leucine. These acids were indentified by paper chromatography and were also found in a free state in other dermatophytes, *Tri. interdigitale*, *Tri. purpureum*, and *Epidermophyton inguinale*.

Colonies were collected, repeatedly washed, pressed to separate the broth, and then dried at 100°. In the case of *Tri. asteroides*, the dried colonies were treated as shown in the flow sheet (Fig. 1). Other dermatophytes were extracted with hot alcohol and chromatographed immediately.

It is of interest that such a considerable amount of amino acids is present in the dermatophytes. Further, some of these, such as glycine, alanine, and leucine, are the itch-inducing amino acids.²⁾ Therefore, it seems convincing that this evidence constitutes one of the factors for the itch of dermatomycoses by *Trichophyton* or *Epidermophyton*.

Further details of these experiments will be reported in a near future.

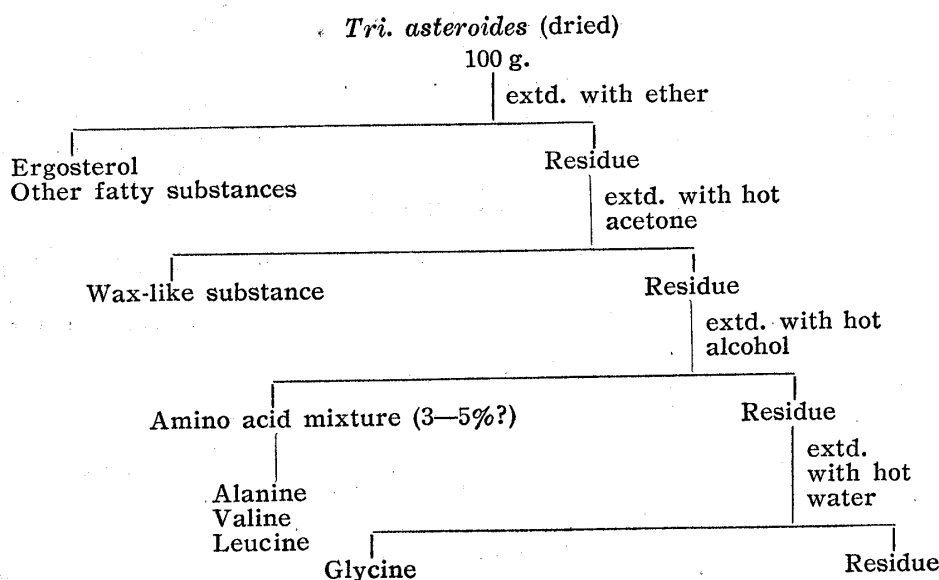


Fig. 1.

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1) Paper read before the Meeting of the Niigata Medical Society on October 17, 1953.
2) J. Yamazaki: *Igaku to Seibutsugaku*, 13, 362(1948).