指纹遗传的双生子研究11．指纹纹型的研究

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摘要　　采用双生子法对26对MZ及24对DZ的指纹纹型进行研究，发现在各类指纹纹型中，斗形最多，挠箕最少。男女间纹型频率差异不大。纹型的左右手对称性为"．20%。作者提出了指纹系数的计算公式，即【（斗形纹数）'（斗形纹数＋箕形纹数）】Ｘ 100%。认为以此来反映t0指纹型的构成和复杂程度，以及分析指纹较为合适。纹型和三辐线在MZ与DZ对间一致率的比较，以及指纹系数、花样强度和生物学指纹价在MZ与DZ对间的相关系数的比较，发现MZ对间的一致率及相关系数明显高于DZ对间的一致率及相关系数，其遗传度为56>-92%。本文发现指纹系数在MZ对间并非完全一致，即MZ对间纹型不一致，且指纹系数呈一连续常态分布。纹型的分析表明，指纹纹型以多基因遗传的可能性较大，但不能排除异质性遗传的可能。

关键词　　双生子法；指纹纹型；多基因遗传；指纹系数公式

分类号

A Twin Study on the Heredity of Finger Prints11. The Study on the Finger-print Patterns

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Abstract

The heredity of the finger-print patterns was studied with a twin method in which theaccuracy of the twin zygosity diagnosis is more than 980Ta,、26 pairs of monozygotic twins and 24 pairs of dizygotic twins were studied. The results showed that there were the whorl (17.5%), the ulnar loop (41.6%), the radial loop (0.7%) and the arch (10.2%) in the pattern types. The frequency of the pattern types had few differences between the males and females. Thr frequency of the symmetry of t址pattern, types between the, left and the right hands of .individuals was 77.20% The authors lead devised a formula of the pattern` eoefficiet (PC) with. which the conaitution of personal patterns of the finger prints was well reflected. There were more concordances and correlations in monozygotic twins than those in dizygntic twins on., the patterns .triradius,, the pattern -type,. PC,山e pattern intensity and the hiological value. There were some monozygotic twins who ' had different pattern types between a vair. The authors considered that the finger-print patterns were determined by polygene. The heretability of the finger-print patterns was about 70%.

Key words Twin study　Finger-print pattern　Multifactorial inheritance　Formula ofpattern coefficient