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东北马鹿和东北梅花鹿F1杂种精母细胞联会复合体分析

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摘要　作者以界面铺张-硝酸银染色技术，对东北马鹿和东北梅花鹿的F1可育杂种的精母细胞联会复合体进行亚显微观察及分析。在减数分裂前期，杂种鹿精母细胞中形成31条完整的常染色体联会复合体、一个端着丝粒染色体/中着丝粒染色体的三价体和XY双价体。这进一步证明，两种亲本鹿的染色体具有高度的同源性，其差别仅在于一个罗伯逊易位。三价体的顺序构型可能和杂种鹿的可育性有关。

关键词　杂种鹿,联会复合体,三价体

分类号

Analysis of Syanptonemal Com plexes in Spermatocytes of the Hybrid F1 Between Red Deer and Sika Deer

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Abstract

The fertile F, hybrid between red deer（Cervus elaphus xanthopygus, 2n＝fib) and sika,deer (C. nzppon hortalorum, 2。二66) has been reported in captivity as well as in nature. The diploid chromosome number is 67. The G-banding patterns of every chromosome of the sika.·deer and red deer are identical except for No. 1 chromosome. According; to the G-banding ,pattern, No. 1 chromosome of sika deer corresponds to the two acrocentric chromosomes o,,red deer, and therefore may involve a Robertsonian translocation.In order to confirm this suggestion, the meiosis of F, hybrid has been examined by ele-,ctroinicroscopically. Thirty-one normal autosomal bivalents, an acrocentric/metacentric trivalentand an XY pair of synaptonernal complex karyotype were observed.　The proximaletelomeric knobs of the two acrocentric elements were paired and projected in the same direc-’tion from the metacentric element. The configuration of the trivalent may be a prerequisitefor normal disjunction and balanced gamete formation, therefore, it can be accounted for,the high fertility of the F, hybrid.

Key words　Fertile hybrid deer　Trivalent　Synaptonemal complex

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