

レプトマネ イリニ3055株の  
5SリボソームRNA遺伝子のクローニング

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**Cloning, characterization and taxonomic significance of gene  
for the 5S ribosomal RNA of *Leptonema illini* strain 3055**

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**ABSTRACT** The genes encoding the 5S ribosomal RNA (rRNA) for *Leptonema illini* strain 3055 were isolated and sequenced. The 5S RNA molecule encoded was 117 nucleotides long. The genome of strain 3055 contained two genes for 5S rRNA that were located close together. The nucleotide sequences of the *Leptonema illini* genes exhibited less similarity to the rRNA gene of *Leptospira interrogans* strain Moulton and also to those of typical eubacterial genes that did the rRNA genes of other leptospire. However, the overall secondary structure of the 5S rRNA encoded exhibited a strong similarity to that of typical eubacterial 5S rRNA. Southern hybridization of the 5S rRNA gene probe with the genomic DNA of strain 965, which is currently classified as *Leptospira biflexa*, showed the latter to have close similarity to that of strain 3055. The physical map of strain 965 was quite similar to that of strain 3055 and was greatly different from that of any other strains of *L. biflexa*. In the organization of rRNA genes, strain 965 is sufficiently different from other members of the genus *Leptospira* to be regarded as a member of the genus *Leptonema*.

抄録 レプトネマの有する5SリボソームRNA遺伝子をクローニングし、塩基配列を明らかにするとともにその発見様式を検討した。その結果、この菌における転写様式は他のどの細菌にも見られない形式である事が明らかになり、この構成、発見様式が

この細菌の分類に利用できることを示した。