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在庆丰链霉菌中质粒参与庆中霉素生物合成的遗传研究1）

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摘要 本研究表明：庆中链霉菌生物合成Qm的能力在遗传上是不稳定的。它可以自发或诱发丧失而产生不合成Qm的q-突变株的遗传性却十稳定。试验了大约1010个q-菌株的孢子，没有发现有自发或诱发生成的q+菌落。但将q+及q-菌株接种在同一斜央上混合培养，用药物抗性或营养缺陷型作为选择性标记，选择混合孢子液，我们发现q+菌株可以把Qm的合成能力转移给q-突变株而产生转移接合子。据此，我们认为Qm的生物合成有质粒的参与。

关键词

分类号

GENETIC STUDIES FOR PLASMID INVOLVING IN QINGFENG-MYCIN BIOSYNTHESIS IN STREPTOMYCES QINGFENCMYCETICUS

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Abstract

This paper reported that the ability of Qm biosynthesis in Streptomyces QIngfeng-myceticus is genetically unstable,it can be eliminated spontaneously or inductively to produce the Qm non-producing colonies,but the q 一mutant contrasting to q 十strain is genetically stable.It can not be reversed to q＋phenotype spontaneously or inductively (frequently leas than 10 一’ 0)，but it can regain the Qm biosynthesis ability to produce q 十transfer conjugants when q+and q-strain were mixed grown on a same slant and then selected the mixed spore suspension by using the drug resistance or auxotrophs as selected marker.So we consider that there is a plasmid involving in the Qm biosyn-

Key words

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