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Cloning of cadmium resistant gene from *Enteobacter cloacae* J-6 Eun Young Kho*, Chi Jong Chung, Sung Jae Lee, Ho Sa Lee Department of biology, Kyunghee University

Enteobacter cloacae J-6 harboring plasmid pERA6 is able to resistant to cadmium and this resistance was due to the plasmid pERA6. Purified 73kb plasmid, pERA6, was partially digested with restriction endonuclease *Hind*III and we found the fragment which contain cadmium resistance genes. After treatment of various restriction enzymes, constructed restriction map. And ligated into plasmid vectors, pVDZ2 and pLG339, several subclones were obtains. Among of them pEH10 grew on cd++ 2mM. Therefore it could be suggested that pEH10 contain cadmium resistance genes.

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Production of lipase from intergeneric hybrids between Aspergillus niger and Penicillium chrysogenum by nuclear transfer

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Intergeneric hybrids formed between *Aspergilus niger* and *Penicillium chrysogenum* were obtained by nuclear transfer technique. Optimal conditions for formation of intergeneric hybrids were investigated. Frequencies of hybrid formation by nuclear transfer were 3 x $10^{-5} \sim 1 \times 10^{-5}$. From observation of genetic stability, conidial size, DNA content, nuclear stain, it was suggested that their karyptypes are aneuploid. The hybrid posses the $1.4 \sim 2.2$ fold higher lipase activities then those of parental strains. It was also revealed that of some hybrids had different isozyme patterns compared to those of parental strains by lipase activity assays.