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Benzene, toluene, ethylbenzene, xylene isomer 분해 유기용매 내성세균 *Pseudomonas savastanoi* BCNU 106의 분해 특성

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Organic solvent tolerant bacterium, designated as strain BCNU 106 is a gram negative, rod-shaped aerobe and grows on benzene, toluene, ethylbenzene, and xylenes (BTEX) as a sole carbon source. According to 16S rDNA analysis and fatty acid analysis, strain BCNU 106 showed highest similarity to *Pseudomonas syringae* var. savastanoi (*Pseudomonas savastanoi*). Strain BCNU 106 was able to utilize toluene, ethylbenzene, both o-, m-, p-xylene , m-cresol and o-cresol. The degradation of o-, m-, p-xylene by strain BCNU 106 is particularly important, since o-xylene is a compound of considerable environmental interest, owing to its recalcitrance; and very few microorganism have been reported to utilize both o-, m-, p-xylene as a sole carbon source.