

# Nocardia canadensis sp. nov.

Submitted by Hijri, Mohamed

Table 1: Complete list of names proposed in the current register list.

Proposed Taxon	Etymology	Description	Parent Taxon	Type	Registry URL
Species <i>Nocardia canadensis</i>	N.L. fem. adj. <i>canadensis</i> , Of Canada, from which this microorganism was isolated	<i>Nocardia canadensis</i> strain WB46 was isolated from the rhizosphere of willow plants ( <i>Salix purpurea</i> L.) growing in soil contaminated with petroleum hydrocarbons in Varennes, Quebec, Canada. It exhibits a 7.15 Mb (69.55% GC content) draft genome sequence containing 6,387 protein-coding genes, 51 tRNA and 15 rRNA sequences, with many genes responsible for petroleum hydrocarbon degradation such as alkane 1-monooxygenase ( <i>alkB</i> ) and naphthalene dioxygenase ( <i>ndo</i> ). 16S rRNA gene analyses, including <i>in silico</i> DNA-DNA hybridization (DDH) and average nucleotide identity (ANI), between <i>Nocardia</i> sp. strain WB46 and a closely related strain, <i>Nocardia asteroides</i> , showed a distance of 63.4% and sequence identity of 88.63%, respectively. These values are below the threshold levels of 70% and 95%, respectively, suggesting that <i>Nocardia canadensis</i> strain WB46 is a new species.	<i>Nocardia</i>	NCBI Assembly: GCF_032656385.1 Ts	<a href="https://seqco.de/i:32942">seqco.de/i:32942</a>