

***Microbacterium sulfonyleivorans* sp. nov., isolated from a sulfonyleurea herbicides degrading consortium**

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Fig S1. (a) Transmission electron micrograph of cell of strain LAM7116^T. Bar, 0.5 μm . The strain was incubated on LB agar medium at 35 °C for 36 h. (b) Colony morphology of strain LAM7116T on incubated at 35°C for 3 days LB medium plate.

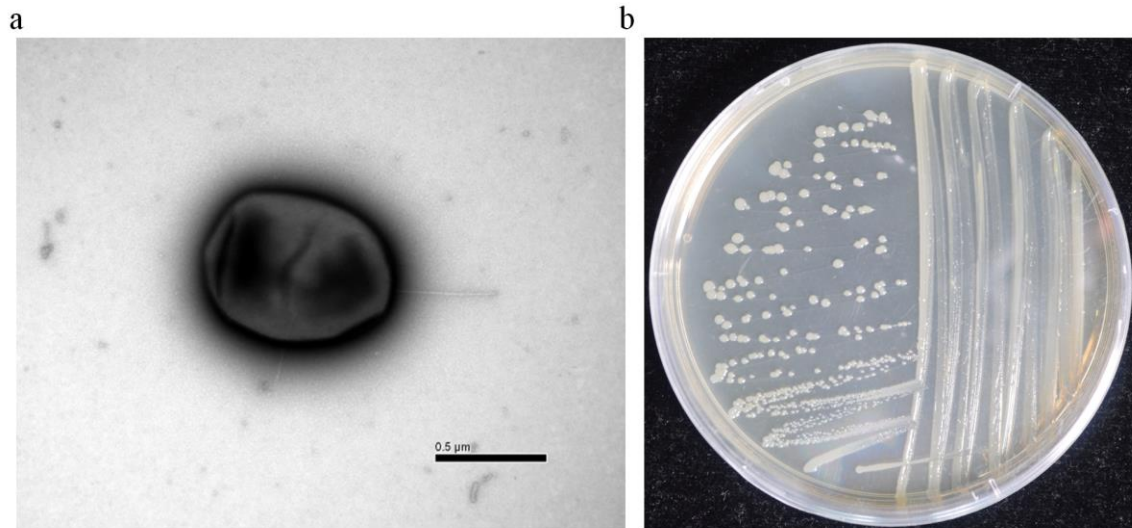


Fig S2. The polar lipids of strain LAM7116^T. Polar lipids profiles of strains separated by two-dimensional TLC, which were detected by spraying with molybdatophosphoric acid reagent. DPG, diphosphatidylglycerol; PG, phosphatidylglycerol; GL, unidentified glycolipid; UL, unidentified lipid.

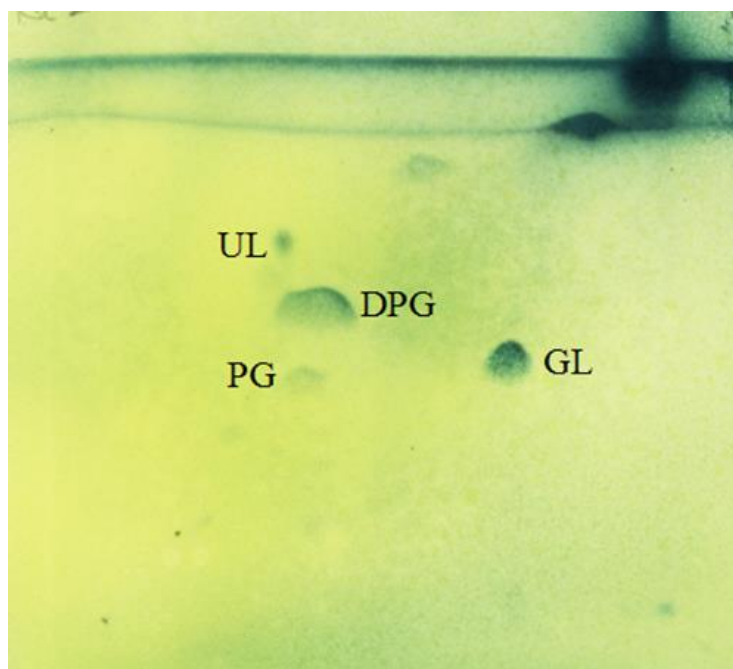


Fig S3. Maximum-parsimony phylogenetic tree of strain LAM7116^T and its relatives based on the comparison of the 16S rRNA gene sequences. Genbank accession numbers were given in parentheses.

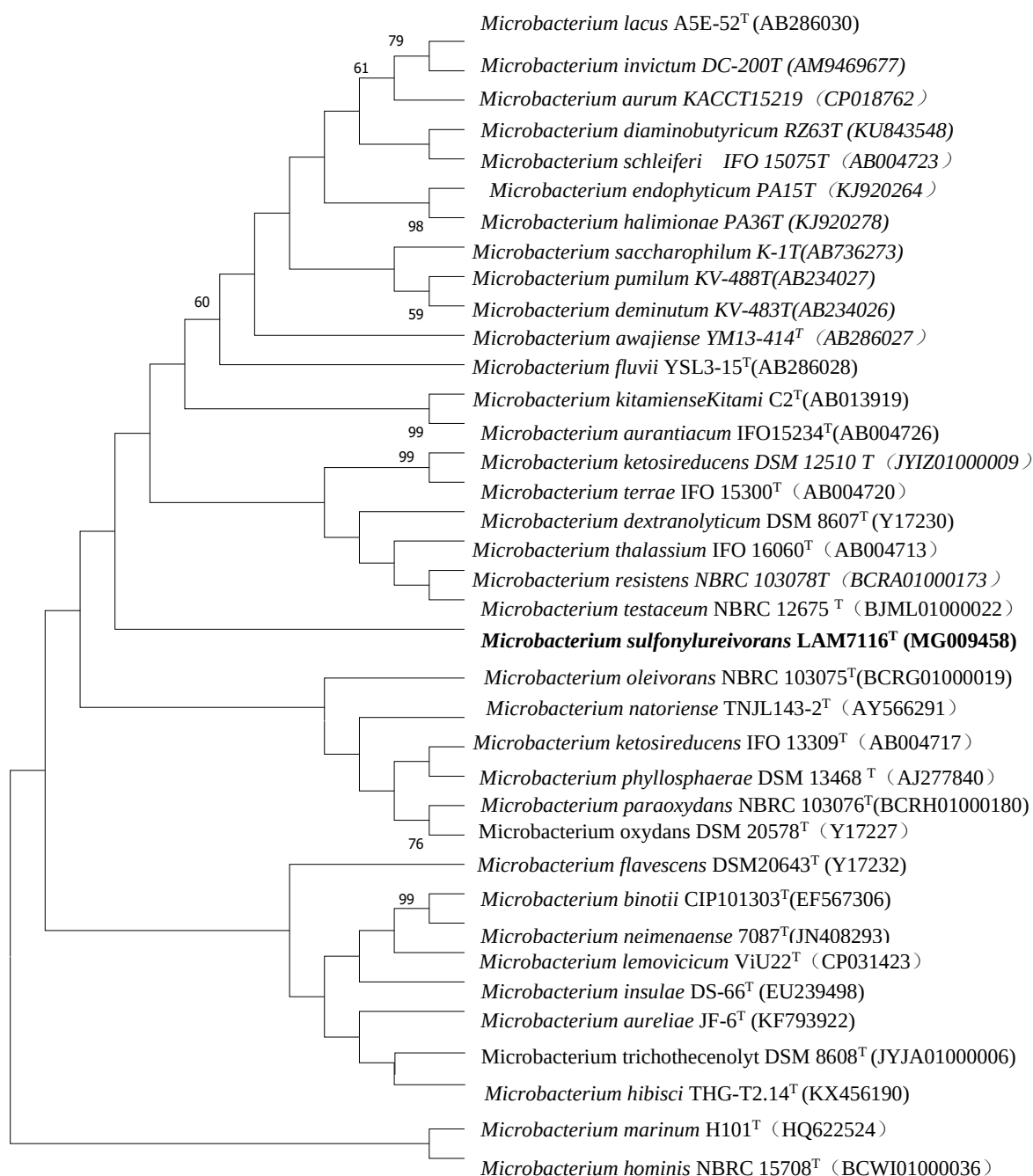


Fig S4. Maximum-likelihood phylogenetic tree of strain LAM7116^T and its relatives based on the comparison of the 16S rRNA gene sequences. Genbank accession numbers were given in parentheses.

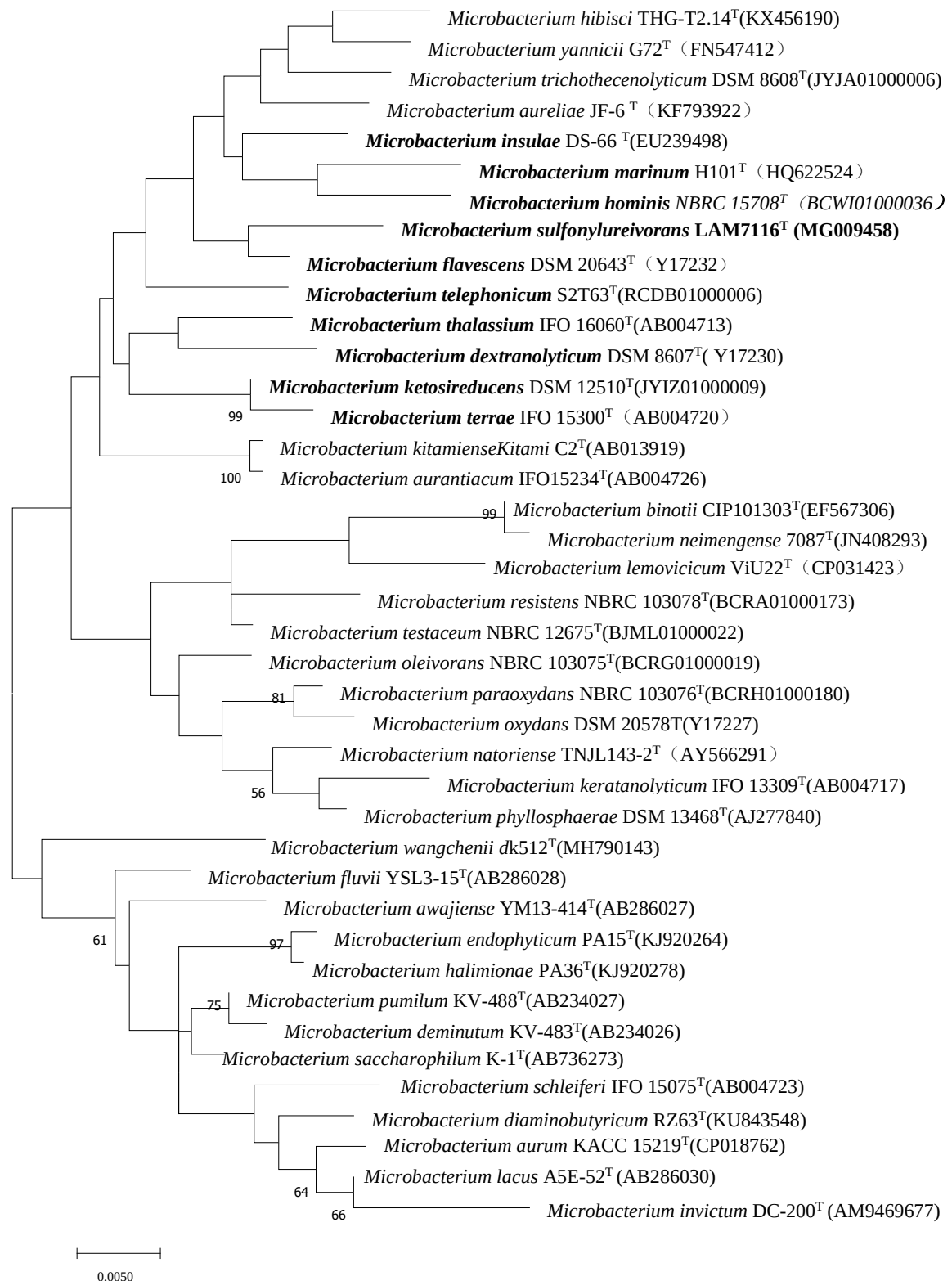


Fig S5. Determination of IAA producing ability of strain LAM7116^T.



Fig S6. Verification of nitrogen fixation ability of strain LAM7116^T.

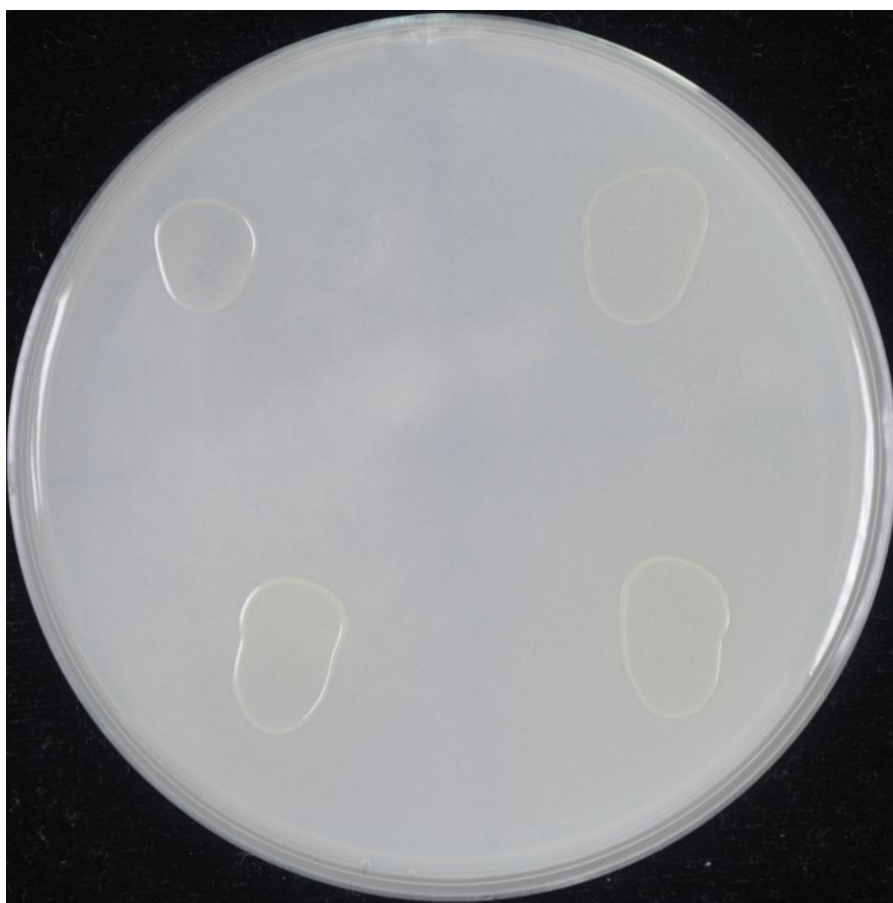


Fig S7. Colony state of bacteria on inorganic phosphorus plate of strain LAM7116^T

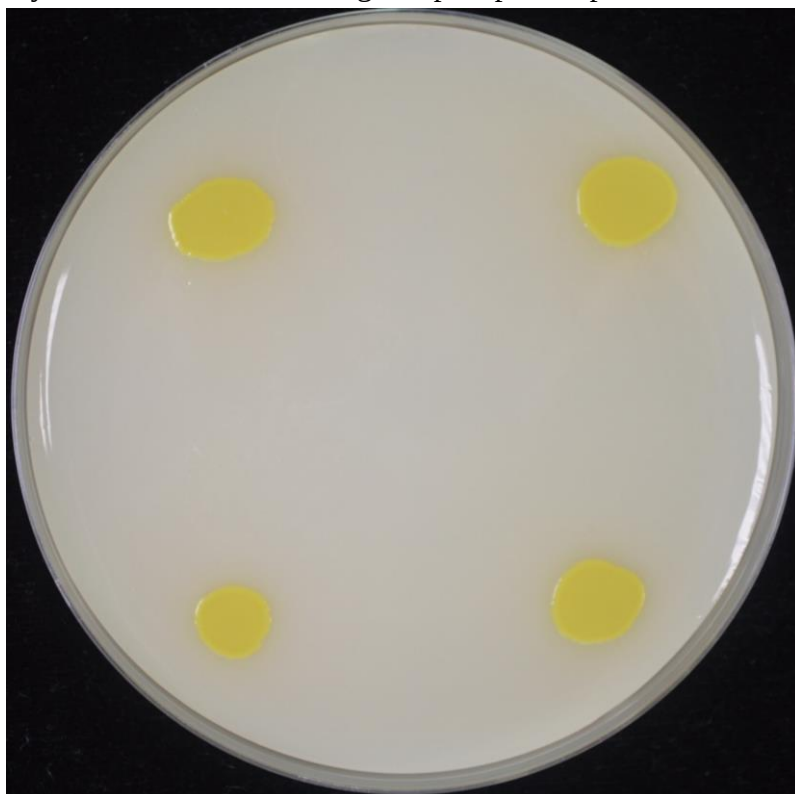


Fig S8. Colony state of bacteria on organic phosphorus plate of strain LAM7116^T.

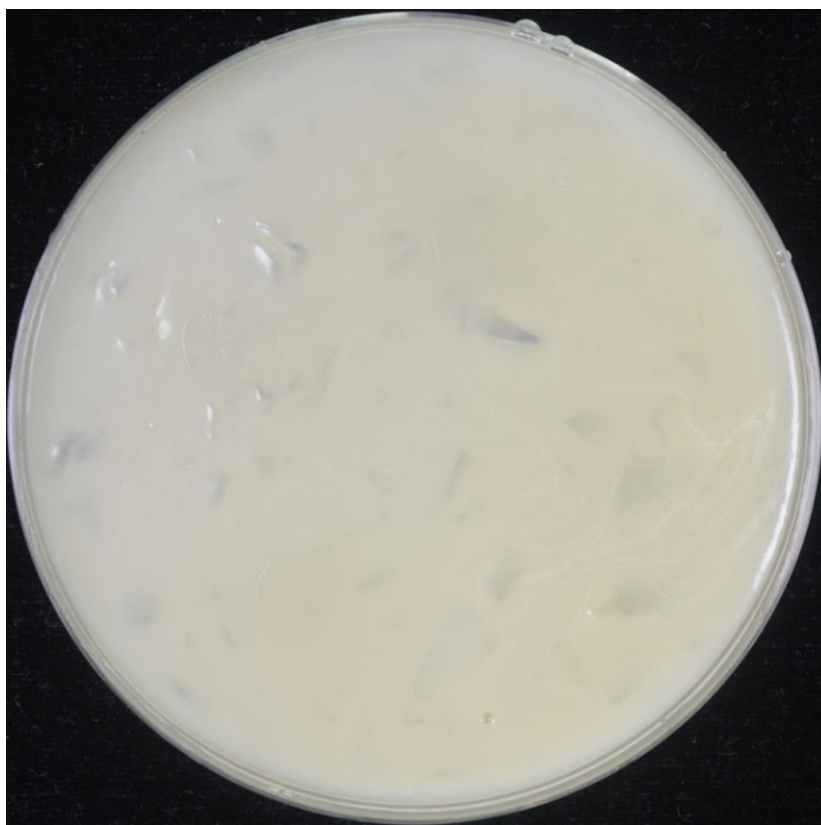


Fig S9. Strain of LAM7116^T produced orange circle on CAS medium plate

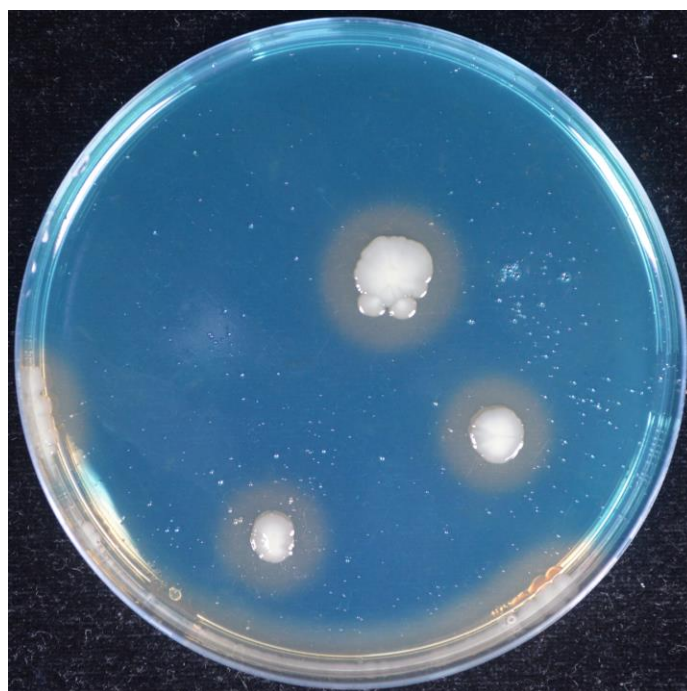


Fig S10. Degradation ability of Nicosulfuron by strain LAM7116^T in 7 days, (a) Incubation 0 d. (b) Incubation 7 d.

