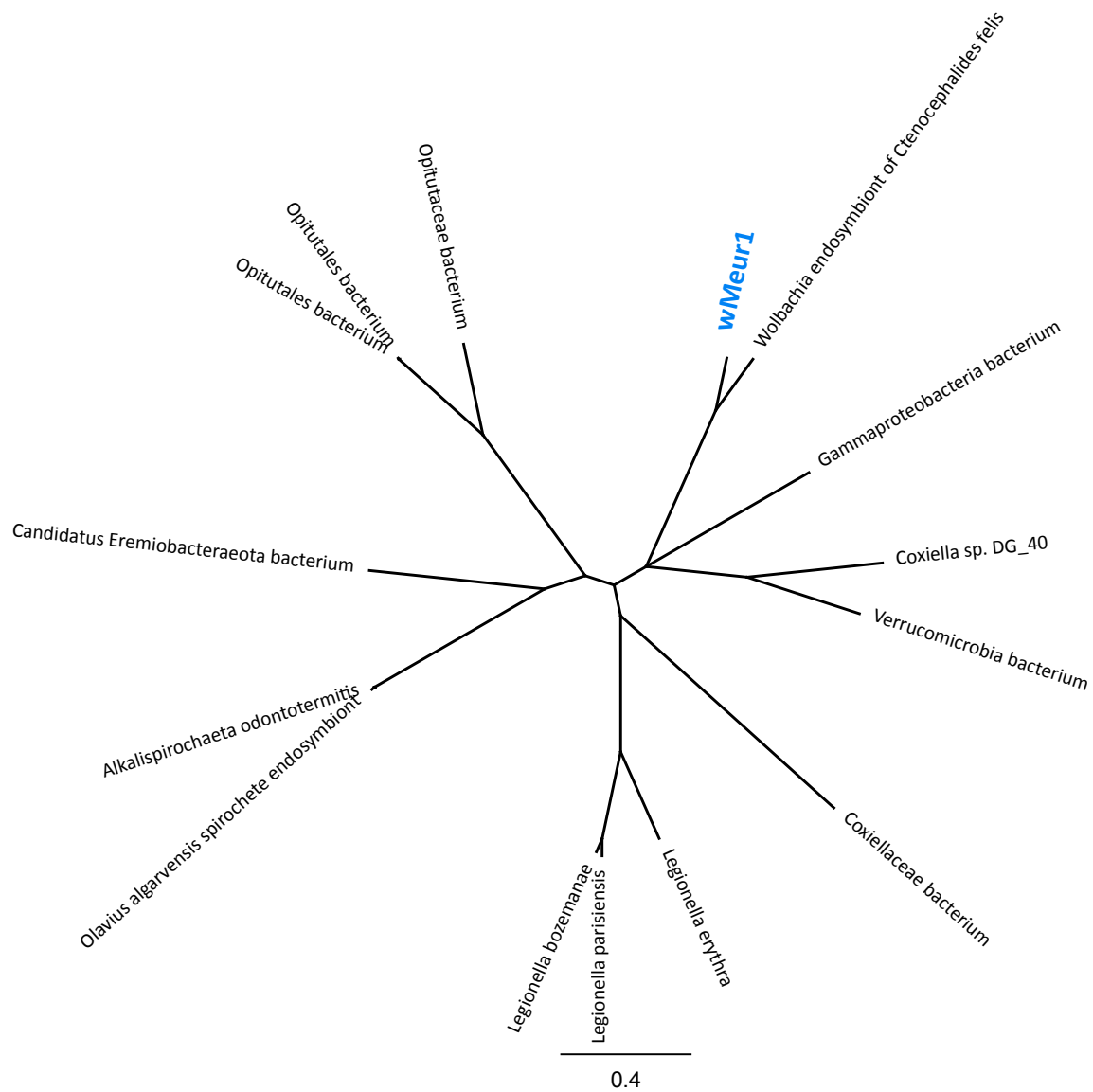
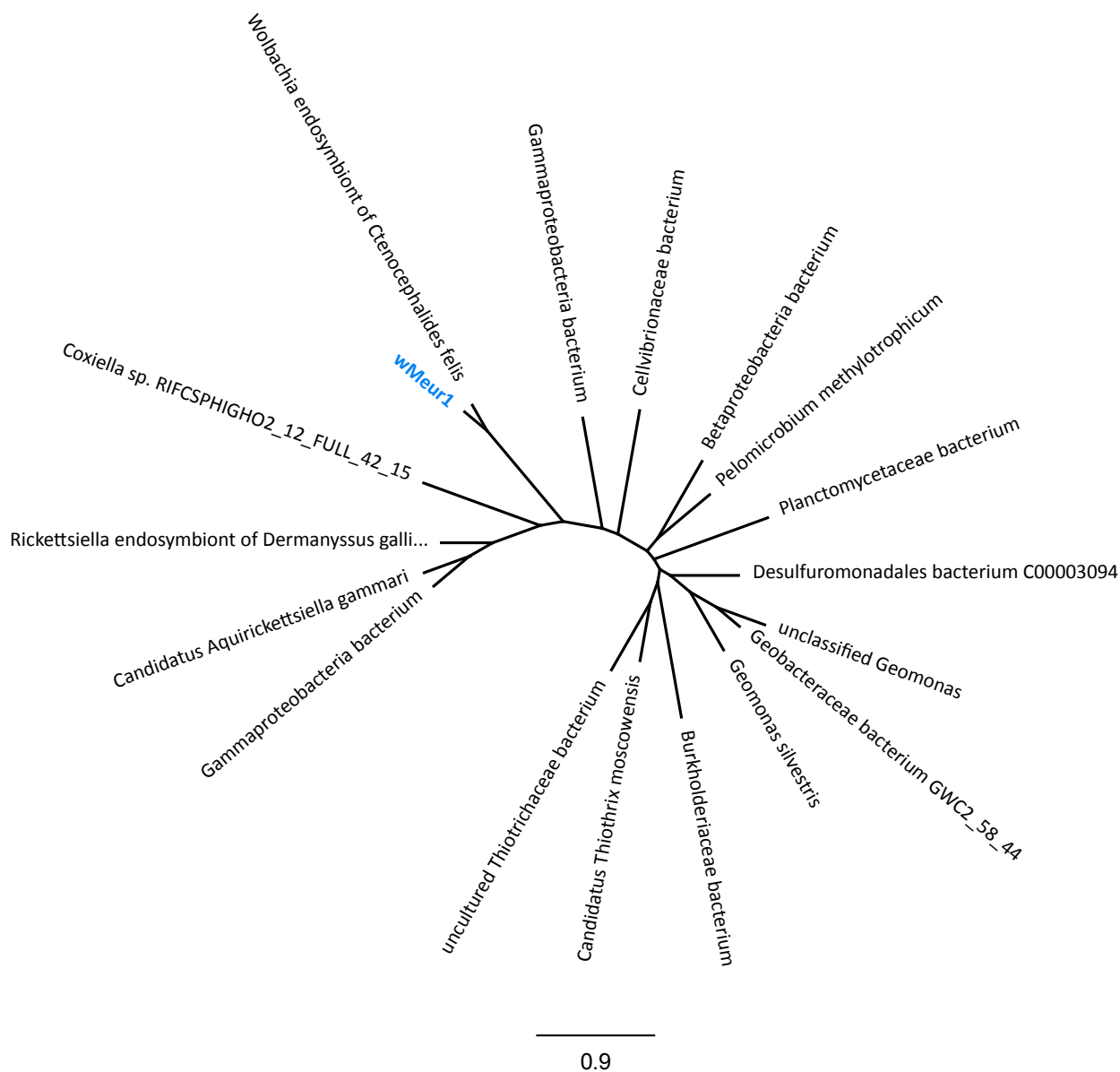


Supplementary figure 6A: Phylogenetic position of pantothenate synthesis related genes; Pantoate--beta-alanine ligase panC (EC 6.3.2.1)



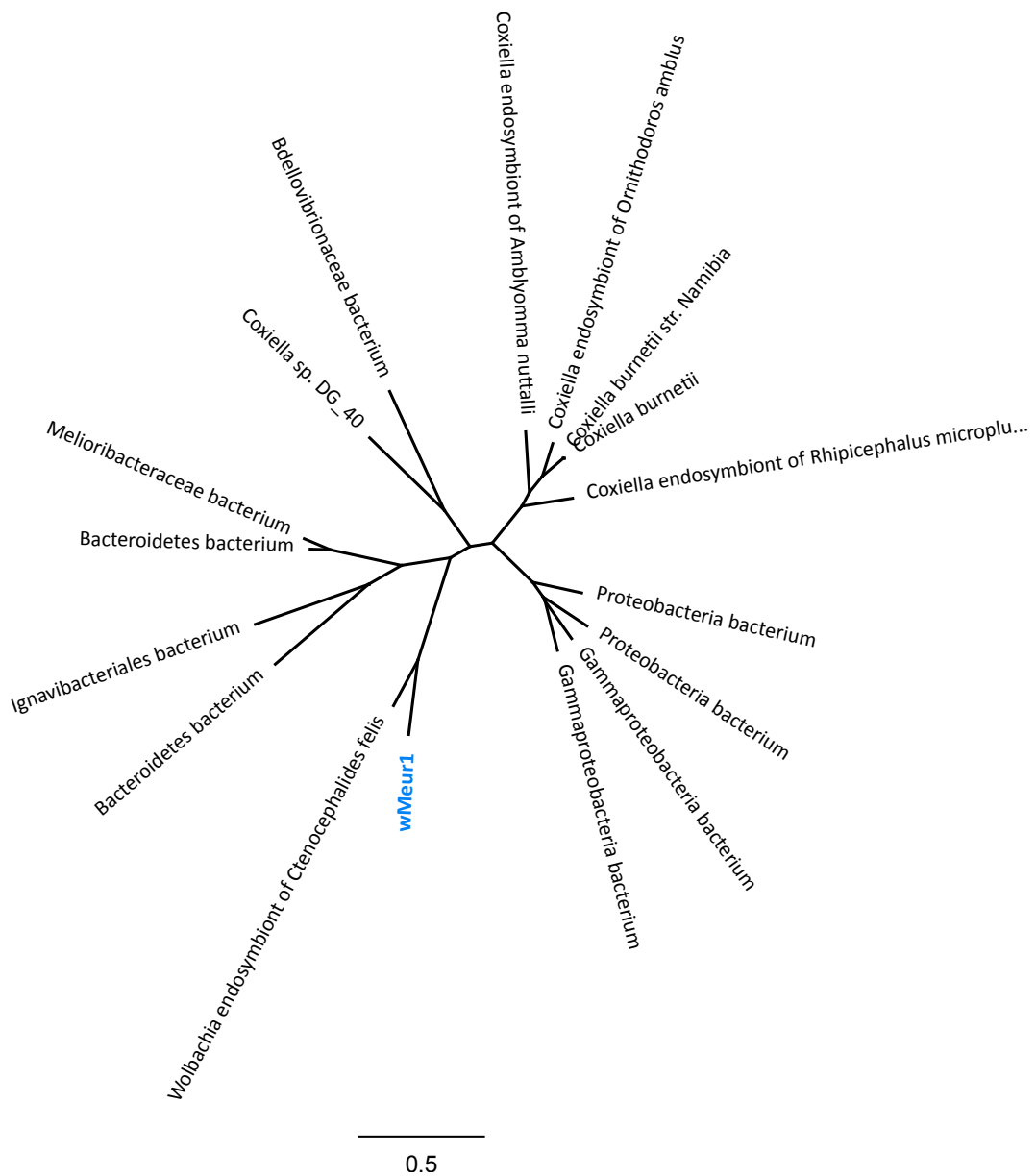
Organism	Name
Olavius algarvensis spirochete endosymbiont	WP_124032323
Alkalispirochaeta odontotermittis	WP_037564257
Candidatus Eremiobacteraeota bacterium	MBN9417370
Opitutaceae bacterium	MAM92216
Opitutales bacterium	MBT6769675
Opitutales bacterium	MBT3482533
Coxiellaceae bacterium	MBV53023
Legionella erythra	WP_058527648
Legionella parisiensis	WP_058516236
Legionella bozemaniae	WP_058458018
Wolbachia endosymbiont of Ctenocephalides felis wCfeT	WP_168464627
Gammaproteobacteria bacterium	MBI2790727
Coxiella sp. DG_40	KPJ67214
Verrucomicrobia bacterium	PWU05281

Supplementary figure 6B: Phylogenetic position of pantothenate synthesis related genes; Ketopantoate reductase PanG (EC 1.1.1.169)



Name	Accession
Gammaproteobacteria bacterium	TLY47062
Candidatus Aquirickettsiella gammari	RDH40168
Rickettsiella endosymbiont of Dermanyssus gallinae	WP_218814024
Wolbachia endosymbiont of Ctenocephalides felis wCfeT	WP_218938889
Gammaproteobacteria bacterium	HBA33227
Burkholderiaceae bacterium	MBV8634101
Cellvibrionaceae bacterium	MAZ88707
Planctomycetaceae bacterium	HID78016
Betaproteobacteria bacterium	MBI1965041
Pelomicrobium methylotrophicum	WP_147800823
Desulfuromonadales bacterium C00003094	OEU60518
uncultured Thiotrichaceae bacterium	CAA6822986
Candidatus Thiothrix moscowensis	MBJ6612093
Geomonas silvestris	WP_183355568
Geobacteraceae bacterium GWC2_58_44	OGU05969
unclassified Geomonas	WP_217289478
Coxiella sp. RIFCSPHIGHO2_12_FULL_42_15	OGO93865

Supplementary figure 6C: Phylogenetic position of pantothenate synthesis related genes; 3-methyl-2-oxobutanoate hydroxymethyltransferase pan B (EC 2.1.2.11)



Name	Accession
Bacteroidetes bacterium	MBU0473530
Ignavibacteriales bacterium	MBN2571901
Melioribacteraceae bacterium	KAB2839543
Bacteroidetes bacterium	MBU2494347
Wolbachia endosymbiont of Ctenocephalides felis wCfeT	WP_168464630
Coxiella sp. DG_40	KPJ67213
Proteobacteria bacterium	MBS0288437
Proteobacteria bacterium	MBS0287918
Gammaproteobacteria bacterium	MBI2790726
Gammaproteobacteria bacterium	MBN9286951
Coxiella endosymbiont of Rhipicephalus microplus	WP_102157157
Coxiella endosymbiont of Amblyomma nuttalli	WP_211923626
Coxiella endosymbiont of Ornithodoros amblus	MBW5802677
Coxiella burnetii str. Namibia	AIT63869
Coxiella burnetii	WP_080744740
Bdellovibrionaceae bacterium	MBT4762628