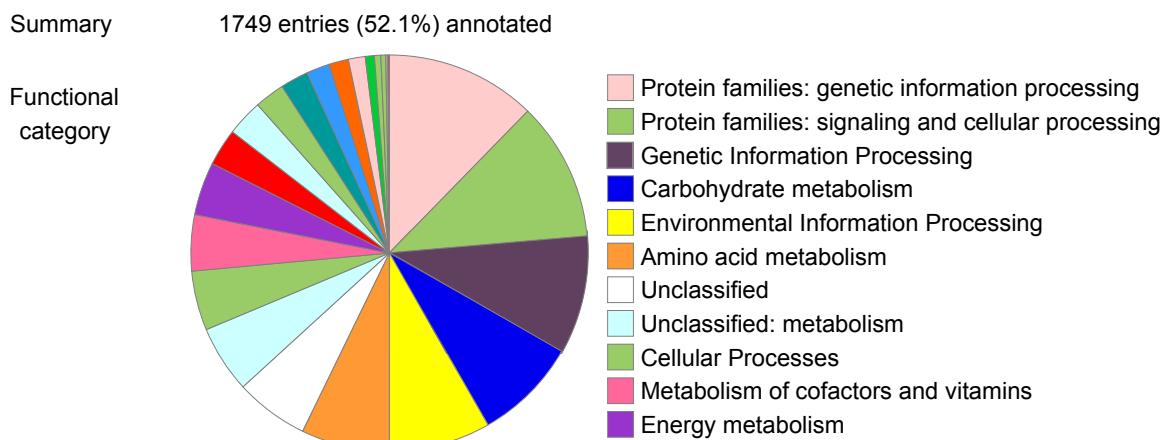
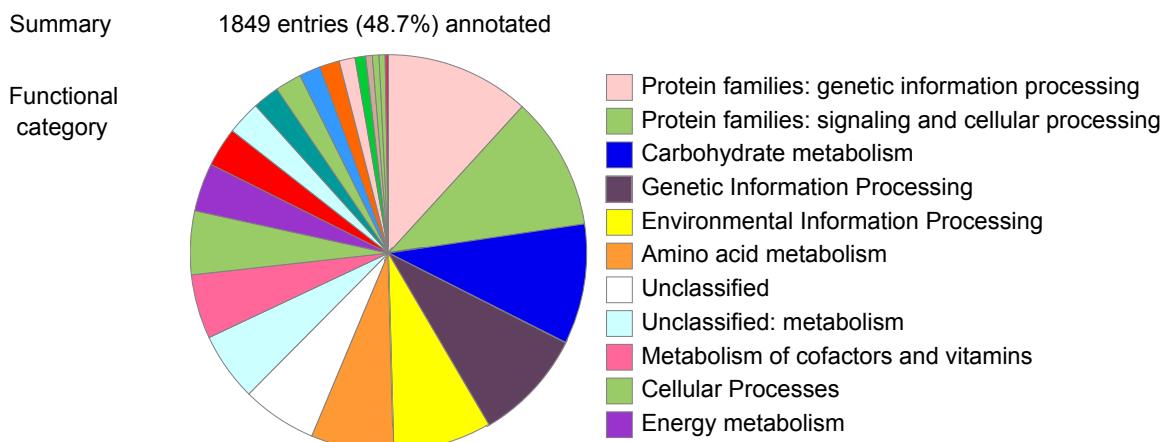


## Supplemental Figures S1-S5

**A**



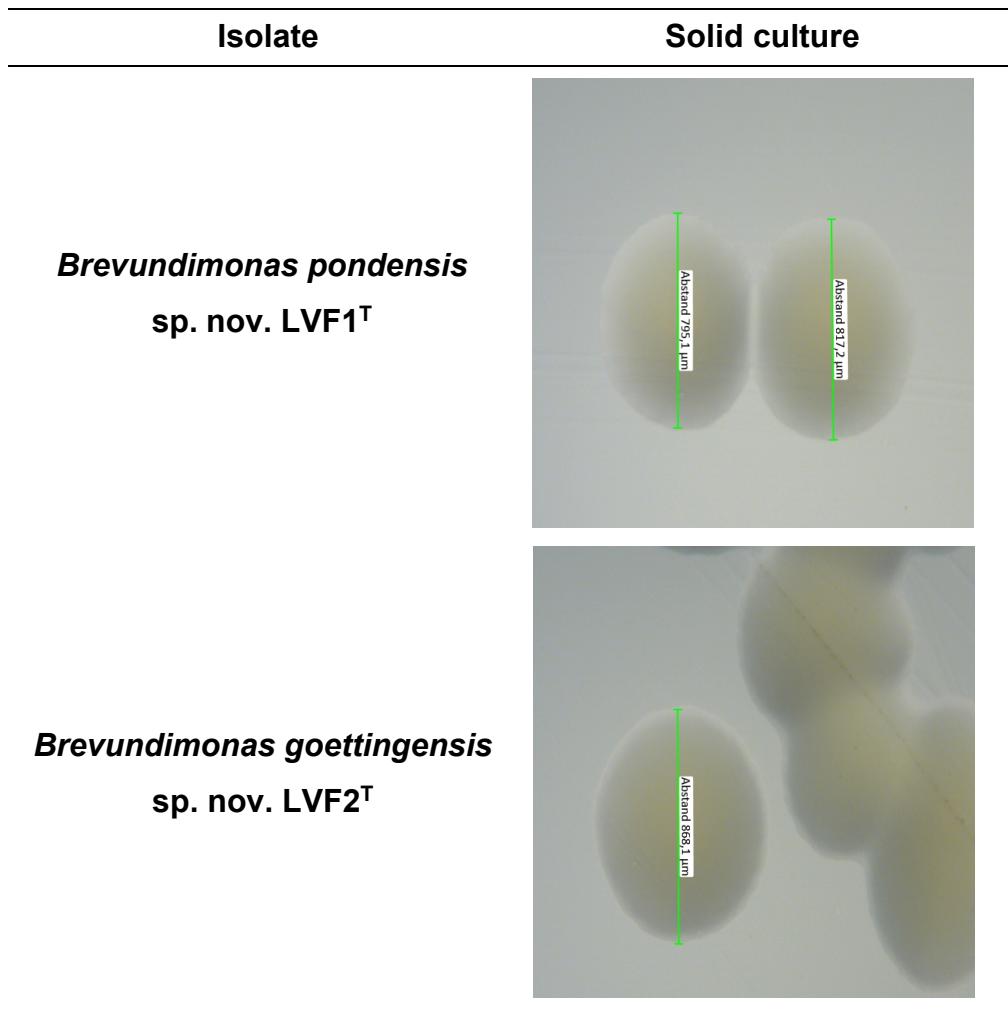
**B**



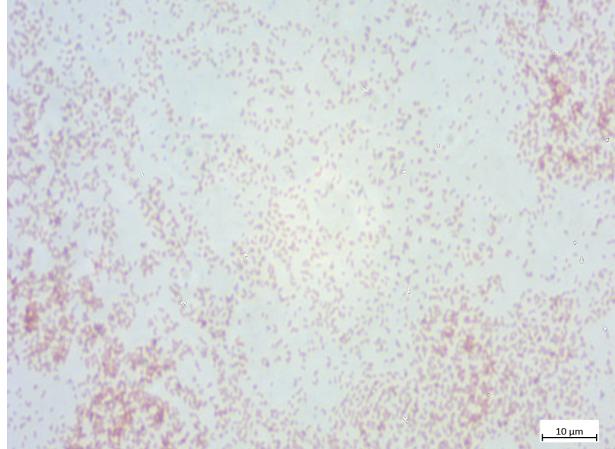
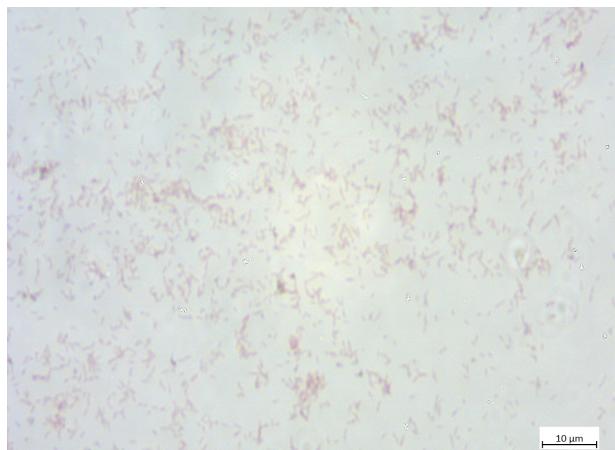
**Supplementary Figure S1. Visualization of BLASTKoala output for (A) *Brevundimonas pondensis* sp. nov. LVF1<sup>T</sup> and (B) *Brevundimonas goettingensis* sp. nov. LVF2<sup>T</sup>.** Functional categories are shown by the presented color code (Kanehisa et al. 2016).

Isolate	Liquid culture
<i>Brevundimonas pondensis</i> sp. nov. LVF1 <sup>T</sup>	
<i>Brevundimonas goettingensis</i> sp. nov. LVF2 <sup>T</sup>	

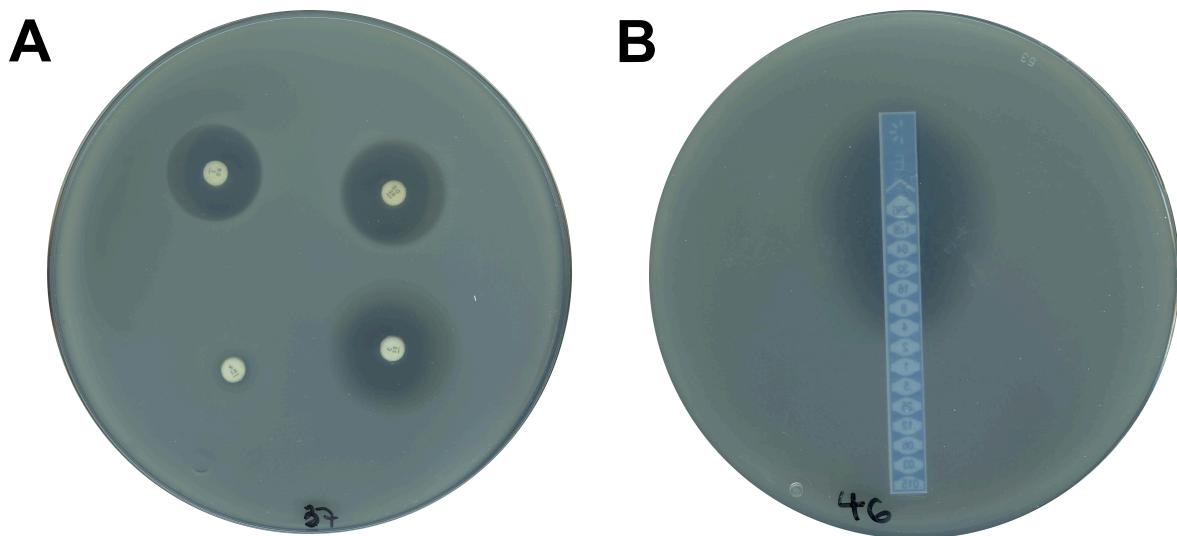
**Supplementary Figure S2. Phenotype of *Brevundimonas pondensis* sp. nov. LVF1<sup>T</sup> and *Brevundimonas goettingensis* sp. nov. LVF2<sup>T</sup>.** Growth was performed in liquid peptone medium supplemented with CaCl<sub>2</sub> (Poindexter 2006) .



Supplementary Figure S3. Colony morphotype of *Brevundimonas pondensis* sp. nov. LVF1<sup>T</sup> and *Brevundimonas goettingensis* sp. nov. LVF2<sup>T</sup>. Growth was performed on solid R2A agar plate.

Isolate	Microscopic image
<b><i>Brevundimonas pondensis</i> sp. nov. LVF1<sup>T</sup></b>	 A microscopic image showing numerous small, rod-shaped bacteria. They are stained a distinct pink color, characteristic of Gram-positive bacteria. A scale bar in the bottom right corner indicates 10 micrometers.
<b><i>Brevundimonas goettingensis</i> sp. nov. LVF2<sup>T</sup></b>	 A microscopic image showing numerous small, rod-shaped bacteria. They are stained a lighter shade of pink compared to LVF1 <sup>T</sup> , appearing more like a pale purple or lavender. A scale bar in the bottom right corner indicates 10 micrometers.

**Supplementary Figure S4. Gram staining of *Brevundimonas pondensis* sp. nov. LVF1<sup>T</sup> and *Brevundimonas goettingensis* sp. nov. LVF2<sup>T</sup>.** LVF1<sup>T</sup> shows a pink color whereas LVF2<sup>T</sup> are slightly pink.



**Supplementary Figure S5. Analysis of antibiotic resistances through soft-agar assay with discs (A) and strip (B).** Exemplarily, antibiotic resistance of isolate LVF1<sup>T</sup> (A) and LVF2<sup>T</sup> (B) can be seen as halo forming. Incubation took place overnight at 30 °C.

## References

- Kanehisa M, Sato Y, Morishima K. 2016. BlastKOALA and GhostKOALA: KEGG tools for functional characterization of genome and metagenome sequences. *J. Mol. Biol.* 428:726–731. doi: 10.1016/j.jmb.2015.11.006.
- Poindexter JS. 2006. Dimorphic Prosthecate Bacteria: The Genera *Caulobacter*, *Asticcacaulis*, *Hyphomicrobium*, *Pedomicrobium*, *Hyphomonas* and *Thiodendron*. In: The Prokaryotes. Vol. 5 Springer New York: New York, NY pp. 72–90. doi: 10.1007/0-387-30745-1\_4.