

Table S1. Results obtained for cellulase activity, IAA synthesis, siderophore production, phosphate solubilization and antifungal activity.; Cellulase activity classes: 0 - no activity; 1 - (> 0 and ≤ 0.5 cm); 2 - (> 0.5 and ≤ 1 cm) and 3 - (> 1 cm); n.d. - not determined. Accession number for partial 16S rRNA gene sequence.

| Origin | Legume species | Isolate | IAA production [$\mu\text{g/ml}$] | Cellulase activity class | ACC deaminase [$\mu\text{mol } \alpha\text{-ketobutyrate/mg protein/h}$] | Antifungal activity | Siderophores production index | Phosphate solubilization index | Accession number |
|----------------|---------------------------------|---------|--|-----------------------------|---|---------------------|----------------------------------|-----------------------------------|------------------|
| Alcácer do Sal | <i>Lupinus angustifolius</i> L. | Q1 | 0 | 2 | 8,75 | yes | 2,681 | 1,222 | MK007434 |
| | | Q2 | 0 | 1 | 2,50 | yes | 3,000 | 1 | MK007435 |
| | | Q3 | 0 | 0 | 0 | - | 1 | 1 | MK007436 |
| | | Q4 | 1,4 | n.d. | 0 | - | 1 | 1 | MK007437 |
| | | Q5 | 1,1 | 0 | 0 | yes | 1 | 1 | MK007438 |
| | | Q6 | 41,6 | 2 | 0 | yes | 1 | 1,238 | MK007439 |
| | <i>Lupinus luteus</i> L. | O1 | 4,4 | 0 | 0 | - | 1 | 1 | MK007424 |
| | | O2 | 0,5 | 1 | 0 | - | 1 | 2,111 | MK007425 |
| | | O3 | 3 | 1 | 0 | - | 1 | 1 | MK007426 |
| | | O4 | 0 | 1 | 0 | - | 1 | 1,867 | MK007427 |
| | <i>Medicago polymorpha</i> L. | R1 | 22,7 | n.d. | 2,58 | - | 3,625 | 1 | MK007440 |
| | | R2 | 0 | 1 | 0 | - | 1,287 | 1 | MK007441 |
| | | R3 | 0 | 2 | 0 | yes | 1 | 1 | MK007442 |
| | | R4 | 5,3 | 0 | 0 | - | 1 | 1 | MK007443 |
| | | R5 | 0 | 1 | 0 | - | 1,203 | 1,300 | MK007444 |
| | | R6 | 0 | 2 | 0 | - | 1 | 1 | MK007445 |
| | | R7 | 0 | 1 | 0 | - | 1,258 | 1,400 | MK007446 |
| | | R8 | 0 | 0 | 0 | yes | 1 | 1 | MK007447 |
| | | T1 | 0,2 | 0 | 0 | - | 1 | 1 | MK007456 |

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|------------------------------------|------------|------|------|------|-----|-------|-------|----------|
| | T10 | 0 | 0 | 0 | - | 1 | 1 | MK007465 |
| | T11 | 0 | 0 | 2,07 | - | 1 | 1,292 | MK007466 |
| | T12 | 0 | 0 | 0 | - | 1 | 1 | MK007467 |
| | T13 | 1,5 | 0 | 0 | - | 1 | 1 | MK007468 |
| | T14 | 0,7 | n.d. | 0 | - | 1 | 1 | MK007469 |
| | T2 | 0 | 0 | 0 | - | 1,285 | 1,333 | MK007457 |
| | T3 | 1,4 | 2 | 0 | - | 1,239 | 1,206 | MK007458 |
| | T4 | 0 | 0 | 0 | - | 1 | 1 | MK007459 |
| | T5 | 54 | 0 | 0 | yes | 1 | 1,587 | MK007460 |
| | T6 | 0 | 1 | 0 | - | 1,267 | 1,237 | MK007461 |
| | T7 | 0,2 | 1 | 0 | - | 1 | 1,237 | MK007462 |
| | T8 | 0 | 0 | 0 | - | 1 | 1 | MK007463 |
| | T9 | 1,8 | 1 | 0 | - | 1 | 1 | MK007464 |
| <i>Ornithopus compressus</i> L. | N1 | 0,1 | 0 | 0 | - | 1 | 1 | MK007422 |
| | N2 | 0 | 0 | 0 | - | 1 | 1 | MK007423 |
| <i>Ornithopus sativus</i> Brot. | P1 | 22 | n.d. | 0 | - | 4,037 | 1 | MK007428 |
| | P2 | 0 | 1 | 0 | - | 1 | 1,550 | MK007429 |
| | P3 | 0 | 1 | 0 | - | 1,276 | 1 | MK007430 |
| | P4 | 0 | 3 | 0 | - | 1 | 1 | MK007431 |
| | P5 | 5,1 | 0 | 0 | - | 1 | 1 | MK007432 |
| | P6 | n.d. | n.d. | 0 | - | n.d. | n.d. | MK007433 |
| <i>Vicia sativa</i> L. | S1 | 0 | 1 | 0 | - | 1 | 1 | MK007448 |
| | S2 | 0 | 0 | 0 | - | 2,540 | 1 | MK007449 |
| | S3 | 0 | 1 | 0 | - | 1 | 1 | MK007450 |
| | S4 | 0,4 | 0 | 0 | - | 1,829 | 1 | MK007451 |
| | S5 | 2,3 | 0 | 0 | - | 1 | 1,322 | MK007452 |
| | S6 | 0,8 | n.d. | 0 | - | 1 | 1 | MK007453 |

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|------------------|---------------------------------|-----------|------|------|------|-----|-------|-------|----------|
| | | S7 | 0 | 0 | 0 | - | 1 | 1,400 | MK007454 |
| | | S8 | 0 | 0 | 0 | - | 2,167 | 1 | MK007455 |
| Herdade da Mitra | <i>Lupinus luteus</i> L. | B1 | 0 | 2 | 0 | - | 1 | 1 | MK007352 |
| | | B2 | 0 | 3 | 0 | - | 1 | 1 | MK007353 |
| | | B3 | 59,1 | 0 | 0 | - | 1 | 2,167 | MK007354 |
| | <i>Medicago polymorpha</i> L. | G1 | 7,2 | 0 | 0 | yes | 1 | 1 | MK007379 |
| | | G2 | 11,7 | 3 | 0 | yes | 4,506 | 1 | MK007380 |
| | | G4 | 7,5 | 3 | 0 | - | 1 | 1 | MK007381 |
| | | G5 | 8,1 | 0 | 0 | - | 1 | 1,583 | MK007382 |
| | | G6 | 3,4 | 0 | 0 | - | 1 | 1 | MK007383 |
| | | J1 | n.d. | n.d. | 0 | - | 1,333 | 1 | MK007391 |
| | | J2 | 11,2 | 3 | 0 | - | 1 | 1 | MK007392 |
| | | J3 | 1,8 | 1 | 0 | - | 1 | 1 | MK007393 |
| | | J4 | 2,5 | 2 | 0 | - | 1 | 1,917 | MK007394 |
| | | J5 | 1,8 | 0 | 0 | - | 1 | 1,250 | MK007395 |
| | | J6 | 97,1 | 2 | 0 | - | 1 | 1 | MK007396 |
| | | J7 | 1,7 | 1 | 0 | - | 1 | 1,667 | MK007397 |
| | | J8 | 2,3 | 2 | 0 | - | 1 | 1 | MK007398 |
| | | J9 | 0,8 | 2 | 0 | - | 1 | 1 | MK007399 |
| | <i>Ornithopus compressus</i> L. | C1 | 12,3 | 0 | 0 | - | 1 | 1 | MK007355 |
| | | C2 | 6,2 | 0 | 0 | - | 1 | 1 | MK007356 |
| | | C3 | 0 | 3 | 0 | - | 1 | 1 | MK007357 |
| | | C4 | 0 | 0 | 0 | - | 1 | 2,000 | MK007358 |
| | | C5 | 0 | 0 | 0 | - | 1,159 | 1,917 | MK007359 |
| | | E1 | 0 | 1 | 0,70 | - | 1 | 1,667 | MK007364 |
| | | E2 | 0,1 | 0 | 0 | - | 1 | 1 | MK007365 |
| | | E3 | 48,0 | 1 | 0 | yes | 1 | 1,889 | MK007366 |
| | | E4 | 0 | 1 | 0 | - | 1,277 | 1 | MK007367 |

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| | E5 | 67,3 | 0 | 0 | - | 1 | 1 | MK007368 |
| | E6 | 0 | 2 | 0 | - | 1,108 | 1 | MK007369 |
| | E6b | 10,7 | 0 | 0 | - | 1 | 1 | MK007370 |
| | E7 | 0 | 0 | 0 | yes | 1,450 | 1 | MK007371 |
| | E8 | 0,5 | 0 | 0 | - | 1 | 1 | MK007372 |
| | E9 | 0 | n.d. | 0 | - | 2,079 | 1 | MK007373 |
| | L1 | 55,3 | 0 | 0 | - | 1 | 1 | MK007403 |
| | L10 | 0 | 3 | 0 | - | 1,203 | 1 | MK007410 |
| | L11 | 0,3 | 0 | 0 | - | 1,075 | 1 | MK007411 |
| | L12 | 14,9 | 1 | 0 | - | 1 | 1 | MK007412 |
| | L13 | 0 | 0 | 0 | yes | 2,232 | 1 | MK007413 |
| | L3 | 0,3 | 0 | 0 | - | 1 | 1 | MK007404 |
| | L4 | 0 | 1 | 0 | - | 1,443 | 1 | MK007405 |
| | L5 | 59,0 | 0 | 0 | yes | 1,305 | 1 | MK007406 |
| | L7 | 0 | 2 | 0 | - | 1,344 | 1,917 | MK007407 |
| | L8 | 0 | 3 | 0 | - | 1 | 1 | MK007408 |
| | L9 | 0 | 2 | 0 | - | 1,421 | 1 | MK007409 |
| <i>Ornithopus pinnatus</i> (Mill.) Druce | K1 | 0,7 | 1 | 0 | - | 1,401 | 1 | MK007400 |
| | K2 | 36,3 | 0 | 0 | - | 1 | 1 | MK007401 |
| | K3 | 47 | 0 | 0 | - | 1 | 1 | MK007402 |
| <i>Scorpiurus muricatus</i> L. | D1 | 0 | 0 | 0 | - | 1 | 1 | MK007360 |
| | D2 | 0 | 0 | 0 | - | 1 | 1 | MK007361 |
| | D3 | 27,5 | 0 | 0 | - | 1 | 1 | MK007362 |
| | D4 | 0 | 1 | 2,01 | - | 2,778 | 1 | MK007363 |
| <i>Scorpiurus sulcatus</i> L. | H1 | 14,7 | 0 | 0 | - | 1,917 | 1 | MK007384 |
| | H2 | 0,6 | 0 | 0 | - | 2,833 | 1 | MK007385 |
| | H3 | 0,8 | 1 | 0 | - | 1,944 | 1 | MK007386 |
| | H4 | 8,7 | 0 | 0 | - | 1 | 1 | MK007387 |

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|----------------------------------|-----------|------|---|------|---|-------|-------|----------|
| | H5 | 0 | 0 | 0 | - | 1 | 1 | MK007388 |
| <i>Trifolium</i> sp. | A1 | 9,3 | 2 | 0 | - | 1 | 1 | MK007348 |
| | A2 | 0 | 0 | 1,23 | - | 1,341 | 1 | MK007349 |
| | A3 | 36,7 | 0 | 0 | - | 1,247 | 1 | MK007350 |
| | A4 | 0 | 0 | 0 | - | 1 | 1 | MK007351 |
| <i>Trifolium subterraneum</i> L. | F1 | 0 | 0 | 0 | - | 1,750 | 1 | MK007374 |
| | F2 | 1 | 0 | 0 | - | 1 | 1 | MK007375 |
| | F3 | 0,7 | 0 | 0 | - | 1 | 1 | MK007376 |
| | F4 | 0 | 0 | 0 | - | 1,268 | 1,417 | MK007377 |
| | F5 | 8,4 | 3 | 0 | - | 1 | 1 | MK007378 |
| <i>Trifolium tomentosum</i> L. | I1 | 37,4 | 2 | 0 | - | 1 | 1 | MK007389 |
| | I2 | 0 | 1 | 0 | - | 1,500 | 1 | MK007390 |
| <i>Vicia sativa</i> L. | M1 | 4,4 | 2 | 0 | - | 1 | 1 | MK007414 |
| | M2 | 0,2 | 0 | 0 | - | 1 | 1 | MK007415 |
| | M3 | 14,7 | 0 | 0 | - | 1,132 | 2,333 | MK007416 |
| | M4 | 4,1 | 3 | 0 | - | 1 | 1 | MK007417 |
| | M5 | 0 | 3 | 0 | - | 1 | 1 | MK007418 |
| | M6 | 0 | 0 | 0 | - | 1 | 1 | MK007419 |
| | M7 | 4,1 | 0 | 0 | - | 1 | 1 | MK007420 |
| | M8 | n.d. | 0 | 1,22 | - | 1 | 1 | MK007421 |