**Table S1:**

**The accession numbers of CLso samples used in Clasnip database building.**

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| **Haplotype** | **Region** | **NCBI Accession ID** |
| A | 16S, 16S-23S | EU834130.1 |
| A | 50S | EU834131.1 |
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| A | Genome | JQIG01000001.1 |
| A | Genome | JMTK01000001.1 |
| A | Genome | LLVZ01000001.1 |
| A | 16S-23S | JX624236.1 |
| A | 50S | JX624241.1 |
| A | 16S | JX624246.1 |
| A | 16S | KR935886.1 |
| A | 16S | KR935887.1 |
| A | 16S | MK726035.1 |
| A | 16S | MK726036.1 |
| B | Genome | CP002371.1 |
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| B | 16S | JF811597.1 |
| B | 50S | JF811598.1 |
| B | 50S | JF811599.1 |
| B | 16S | KU588194.1 |
| B | 16S | KU588195.1 |
| B | 16S | MK726032.1 |
| B | 16S | MK726033.1 |
| B | 16S | MK726034.1 |
| B | 16S | MK726037.1 |
| C | Genome | LVWB01000001.1 |
| C | Genome | LWEB01000001.1 |
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| C | 16S | KF170063.1 |
| C | 16S | KF170065.1 |
| C | 16S | KF170066.1 |
| C | 16S-23S | KJ584927.1 |
| C | 16S-23S | KJ584928.1 |
| C | 16S-23S | KJ584930.1 |
| C | 16S-23S | KJ584931.1 |
| C | 16S, 16S-23S, 5S | KX431889.1 |
| C | 16S, 16S-23S, 5S | KX431890.1 |
| C | 16S, 16S-23S, 5S | KX431891.1 |
| C | 16S-23S | KY619975.1 |
| C | 16S-23S | KY619976.1 |
| C | 16S-23S | KY619978.1 |
| C | 50S | KY619987.1 |
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| C | 16S | KY624595.1 |
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| C | 16S-23S | MF421729.1 |
| C | 16S-23S | MF421730.1 |
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| C | 16S-23S | MG701019.1 |
| C | 16S-23S | MG701020.1 |
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| Cras1a | omp | MT238966.1 |
| Cras1a | omp | MT238967.1 |
| Cras1a | omp | MT238970.1 |
| Cras1a | omp | MT238971.1 |
| Cras1a | omp | MT238972.1 |
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| Cras1a | 50S | MT249188.1 |
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| Cras1b | 16S | MT229450.1 |
| Cras1b | 16S | MT229451.1 |
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| Cras1b | 16S-23S | MT230496.1 |
| Cras1b | 16S-23S | MT230497.1 |
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| Cras1b | omp | MT238968.1 |
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| Cras2 | 16S-23S | MT230509.1 |
| Cras2 | omp | MT238975.1 |
| Cras2 | omp | MT238976.1 |
| Cras2 | omp | MT238977.1 |
| Cras2 | omp | MT238978.1 |
| Cras2 | 50S | MT249167.1 |
| Cras2 | 50S | MT249172.1 |
| Cras2 | 50S | MT249190.1 |
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| D | 50S | KX618640.1 |
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| D | 50S | KX752582.1 |
| D | 16S | KX752587.1 |
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| D | 16S-23S | KY486283.1 |
| D | 16S-23S | KY486284.1 |
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| D | 16S-23S | KY486288.1 |
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| D | 50S | KY486293.1 |
| D | 50S | KY486294.1 |
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| D | 16S | KY624596.1 |
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| D | 50S | MG701021.1 |
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| D | fbpA | MG705010.1 |
| D | ftsZ | MG705047.1 |
| D | glyA | MG705084.1 |
| D | groEL | MG705121.1 |
| D | gyrB | MG705158.1 |
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| D | 16S-23S | MG911709.1 |
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| D | 16S | MG911712.1 |
| D | 50S | MG911714.1 |
| D | 50S | MG911715.1 |
| D | 16S | MH061376.1 |
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| D | 50S | MH061378.1 |
| D | 50S | MH748578.1 |
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| E | 16S-23S | KX752578.1 |
| E | 16S-23S | KX752579.1 |
| E | 16S-23S | KX752581.1 |
| E | 50S | KX752583.1 |
| E | 50S | KX752584.1 |
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| E | 16S | KX752588.1 |
| E | 16S | KX752589.1 |
| E | 16S-23S | KY619980.1 |
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| E | 50S | KY619986.1 |
| E | 16S | KY619991.1 |
| E | 16S | KY619992.1 |
| E | 50S | KY777461.1 |
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| E | 16S | MG911713.1 |
| E | 50S | MG911716.1 |
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| F | omp | MH259701.1 |
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| G | 16S-23S | MN256498.1 |
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| H-Con | 16S | KT354975.1 |
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| H | 16S-23S | MK800168.1 |
| H | 50S | MK800169.1 |
| U | 16S | MG701016.1 |
| U | 16S-23S | MG701018.1 |
| U | 50S | MG701023.1 |
| U | 50S | MG701026.1 |
| U | 50S | MG701027.1 |
| U | 50S | MG701028.1 |
| U | 50S | MG701029.1 |
| U | adk | MG704923.2 |
| U | adk | MG704934.2 |
| U | adk | MG704935.2 |
| U | adk | MG704940.2 |
| U | adk | MG704941.2 |
| U | atpA | MG704960.1 |
| U | atpA | MG704971.1 |
| U | atpA | MG704972.1 |
| U | atpA | MG704977.1 |
| U | atpA | MG704978.1 |
| U | fbpA | MG704997.1 |
| U | fbpA | MG705008.1 |
| U | fbpA | MG705009.1 |
| U | fbpA | MG705014.1 |
| U | fbpA | MG705015.1 |
| U | ftsZ | MG705034.1 |
| U | ftsZ | MG705045.1 |
| U | ftsZ | MG705046.1 |
| U | ftsZ | MG705051.1 |
| U | ftsZ | MG705052.1 |
| U | glyA | MG705071.1 |
| U | glyA | MG705082.1 |
| U | glyA | MG705083.1 |
| U | glyA | MG705088.1 |
| U | glyA | MG705089.1 |
| U | groEL | MG705108.1 |
| U | groEL | MG705119.1 |
| U | groEL | MG705120.1 |
| U | groEL | MG705125.1 |
| U | groEL | MG705126.1 |
| U | gyrB | MG705145.1 |
| U | gyrB | MG705156.1 |
| U | gyrB | MG705157.1 |
| U | gyrB | MG705162.1 |
| U | gyrB | MG705163.1 |