SUPPLEMENTAL MATERIALS:

IN SITU PHYLOGENETIC STRUCTURE AND DIVERSITY OF WILD BRADYRHIZOBIUM COMMUNITIES

J. L. SACHS, S.W. KEMBEL, A. H. LAU, & E. L. SIMMS

Protocol for MAG media

1) MAG Media Reagents (per liter)
   1.1g MES
   1.3g HEPES
   1.0g Arabinose (DL)
   1.0g Gluconic Acid–Sodium Salt)
   1.0g Yeast extract
   2ml KH₂PO₄ Solution (110g/L)
   4ml Na₂SO₄ Solution (62.5 g/L)
   1ml MgSO₄7H₂O Solution (180g/L)
   2ml NH₄Cl Solution (160g/L)
   1ml CaCl₂ Solution (13g/L)
   1ml FeCl₃7H₂O Solution (6.7g/L)
   Adjust pH to 6.6 with KOH
   Autoclave for 40 minutes

SUPPLEMENTAL TABLES

Supplemental Table 1. Plant numbers and species collected at each unique GPS site

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<tr>
<th>Site</th>
<th>GPS Coordinates</th>
<th>Plants Collected</th>
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<tbody>
<tr>
<td>1</td>
<td>38°19'070 N, 123°03'560 W</td>
<td>L. heermanii 15 and 17, L. strigosus 14 and 16</td>
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<td>L. strigosus 20-25</td>
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<td>3</td>
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<td>4</td>
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<td>L. strigosus 1-4</td>
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<td>6</td>
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<td>L. heermanii 34</td>
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<td>L. micranthus 30</td>
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Supplemental Table 2. Number of isolates and sequenced haplotypes from different micro-environments and hosts.

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B. Samples within each host species

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<th>LoH</th>
<th>LoMe</th>
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### Supplemental Table 3.

#### Sampling type and spatial location of all sequenced isolates

**Table 3.** Sampling type and spatial location of all sequenced isolates. Isolate source = year (05=2005), plant species (LoA = *Lotus angustissimus*, LoM = *L. micranthus*, LoH = *L. heermannii*, LoS = *L. strigosus*), and nodule or root surface numbers. Genotype ID = isolate name or GenBank isolate when unique, and multiply recovered genotypes are named with the host species (A, M, H, S), isolate type(s) (N = nodule, R = root surface) and the total number of isolates that share the genotype. Nod/old.tip = isolation type (nod = nodule, old = mature portion of the root surface, tip = root surface tip. Lat = latitude and Long = longitude. Nod = Nodulation status (Y = positive nodulation in all five test plants, N = lack of nodulation in all five test plants, - = untested).

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Table legend:

Table 1. Plant numbers and species collected at each unique GPS site.

Table 2. Number of isolates and sequenced haplotypes from each sampled community. All = all samples, Nodule = nodule samples, Root surface = root-surface biofilm samples, Root tips = root-surface samples from the distal 1cm of the root, Old roots = root-surface samples from proximal (non-tip) root sections, I = number of isolates, H = Haplotypes recovered, H/I = recovered haplotypes divided by total isolates, LoA = *Lotus angustissimus*, LoM = *L. micranthus*, LoH = *L. heermannii*, LoS = *L. strigosus*.

Table 3. Sampling type and spatial location of all sequenced isolates. Isolate source = year (2005=05), plant species (LoA = *Lotus angustissimus*, LoM = *L. micranthus*, LoH = *L. heermannii*, LoS = *L. strigosus*), and
nodule or root surface numbers. Genotype ID = isolate name when unique, whereas multiply recovered genotypes are named with the host species (A, M, H, S), isolate type(s) (N = nodule, R = root surface) and the total number of isolates that share the genotype. GenBank isolates are labeled with their accession numbers. Nod/old/tip = isolation type (nod = nodule, old = mature portion of the root surface, tip = root surface tip. Lat = latitude and Long = longitude. Nod = Nodulation status (Y = positive nodulation in all five test plants, N = lack of nodulation in all five test plants).