

MATERIAL SUPLEMENTARIO

Table 1. Physicochemical soil properties and heavy metals total content at RB sampled soil

| Physical properties |          |          |         |    |                  | Chemical properties |                         |          |              |                           |                           |                          |                         |
|---------------------|----------|----------|---------|----|------------------|---------------------|-------------------------|----------|--------------|---------------------------|---------------------------|--------------------------|-------------------------|
| Sand (%)            | Silt (%) | Clay (%) | Texture | pH | C <sub>org</sub> | CE (dS/m)           | N <sub>tot</sub> (g/kg) | P (ug/g) | CIC (meq/kg) | Ca <sup>2+</sup> (meq/kg) | Mg <sup>2+</sup> (meq/kg) | Na <sup>+</sup> (meq/kg) | K <sup>+</sup> (meq/kg) |
| 38.1                | 48       | 14.3     | Loam    | 7  | 1.67             | 1.06                | 3.87                    | 35.5     | 331          | 167                       | 43                        | 12                       | 9                       |

| Heavy metal total content |           |          |           |           |           |           |           |           |           |           |           |           |
|---------------------------|-----------|----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| S (g/kg)                  | Fe (g/kg) | U (mg/g) | Cd (mg/g) | Cr (mg/g) | Cu (mg/g) | Mn (mg/g) | Mo (mg/g) | Ni (mg/g) | Pb (mg/g) | Sr (mg/g) | Zn (mg/g) | As (mg/g) |
| < 2                       | 28        | 1.67     | < 10      | 313.33    | 73.33     | 403.33    | < 10      | 16.33     | 66.67     | 223.33    | 326.67    | <10       |

**Table 2.** Abundance of AMF MOTUs at RRB sampled site defined at 97% or 90% of sequence similarity

| Taxonomic assignment       | 97% Dataset |                     | 90% Dataset |                     |
|----------------------------|-------------|---------------------|-------------|---------------------|
|                            | MOTUs no    | Sequences abundance | MOTUs no    | Sequences abundance |
| <i>Glomeromycota</i>       | 138         | 3312                | -           | -                   |
| <i>Glomeromycota</i>       | 172         | 4                   | -           | -                   |
| <i>Glomeromycota</i>       | -           | -                   | -           | 36                  |
| <i>Glomeromycota</i>       | -           | -                   | -           | 7640                |
| <b>Diversisporales</b>     |             |                     |             |                     |
| <i>Scutellospora sp.</i>   | 59          | 25                  | -           | -                   |
| <b>Glomerales</b>          |             |                     |             |                     |
| <i>Glomerales</i>          | 22          | 2                   | -           | -                   |
| <i>Glomerales</i>          | 41          | 28                  | -           | -                   |
| <i>Glomerales</i>          | 53          | 3                   | -           | -                   |
| <i>Glomerales</i>          | 118         | 4                   | -           | -                   |
| <i>Glomerales</i>          | 149         | 33                  | -           | -                   |
| <i>Glomerales</i>          | 166         | 2631                | -           | -                   |
| <i>Glomerales</i>          | 168         | 30                  | -           | -                   |
| <i>Glomerales</i>          | 170         | 10270               | -           | -                   |
| <i>Glomerales</i>          | 190         | 12                  | -           | -                   |
| <i>Glomerales</i>          | 209         | 2                   | -           | -                   |
| <i>Glomerales</i>          | -           | -                   | 35          | 30575               |
| <i>Glomerales</i>          | -           | -                   | 36          | 11727               |
| <i>Glomerales</i>          | -           | -                   | 62          | 122                 |
| <i>Gomerales</i>           | -           | -                   | 74          | 2676                |
| <i>Glomerales</i>          | -           | -                   | 81          | 1552                |
| <i>Claroideoglopus sp.</i> | 11          | 3                   | -           | -                   |
| <i>Claroideoglopus sp.</i> | 70          | 9                   | -           | -                   |
| <i>Claroideoglopus sp.</i> | 76          | 246                 | -           | -                   |
| <i>Claroideoglopus sp.</i> | 82          | 1                   | -           | -                   |
| <i>Claroideoglopus sp.</i> | 91          | 54                  | -           | -                   |
| <i>Claroideoglopus sp.</i> | 115         | 195                 | -           | -                   |
| <i>Claroideoglopus sp.</i> | 127         | 1                   | -           | -                   |
| <i>Claroideoglopus sp.</i> | 128         | 4                   | -           | -                   |
| <i>Claroideoglopus sp.</i> | 154         | 123                 | -           | -                   |
| <i>Claroideoglopus sp.</i> | 157         | 26404               | -           | -                   |
| <i>Claroideoglopus sp.</i> | 205         | 3                   | -           | -                   |
| <i>Claroideoglopus sp.</i> | 66          | 2702                | -           | -                   |
| <i>Claroideoglopus sp.</i> | -           | -                   | 51          | 200                 |
| <i>Claroideoglopus sp.</i> | -           | -                   | 69          | 29542               |
| <i>Dominikia iranica</i>   | 17          | 25                  | -           | -                   |
| <i>D. iranica</i>          | 18          | 6                   | -           | -                   |
| <i>D. iranica</i>          | 38          | 7                   | -           | -                   |
| <i>D. iranica</i>          | 58          | 408                 | -           | -                   |

|                                  |     |       |    |      |
|----------------------------------|-----|-------|----|------|
| <i>D. iranica</i>                | 63  | 19    | -  | -    |
| <i>D. iranica</i>                | 74  | 21198 | -  | -    |
| <i>D. iranica</i>                | 110 | 85    | -  | -    |
| <i>D. iranica</i>                | 126 | 1     | -  | -    |
| <i>D. iranica</i>                | 156 | 2     | -  | -    |
| <i>D. iranica</i>                | 188 | 16    | -  | -    |
| <i>D. iranica</i>                | 210 | 20    | -  | -    |
| <i>Funneliformis sp.</i>         | 79  | 1     | -  | -    |
| <i>Funneliformis sp.</i>         | 175 | 21    | -  | -    |
| <i>Funneliformis constrictum</i> | 12  | 181   | -  | -    |
| <i>Funneliformis mosseae</i>     | 179 | 25    | -  | -    |
| <i>F. mosseae</i>                | 197 | 23    | -  | -    |
| <i>F. mosseae</i>                | -   | -     | 82 | 3    |
| <i>Glomus indicum</i>            | 123 | 1     | -  | -    |
| <i>Rhizophagus sp.</i>           | 77  | 5171  | -  | -    |
| <i>Rhizophagus sp.</i>           | 89  | 1     | -  | -    |
| <i>Rhizophagus sp.</i>           | 96  | 60    | -  | -    |
| <i>Rhizophagus sp.</i>           | 203 | 4     | -  | -    |
| <i>Rhizophagus intraradices</i>  | 20  | 3654  | -  | -    |
| <i>R. intraradices</i>           | 25  | 1     | -  | -    |
| <i>R. intraradices</i>           | 108 | 17    | -  | -    |
| <i>R. intraradices</i>           | 143 | 1     | -  | -    |
| <i>R. intraradices</i>           | 174 | 23    | -  | -    |
| <i>R. intraradices</i>           | 178 | 14    | -  | -    |
| <i>R. intraradices</i>           | 189 | 20    | -  | -    |
| <i>R. intraradices</i>           | 216 | 2735  | -  | -    |
| <i>Rhizophagus irregularis</i>   | 131 | 3     | -  | -    |
| <i>Septoglomus viscosum</i>      | 15  | 2341  | -  | -    |
| <i>S. viscosum</i>               | 30  | 127   | -  | -    |
| <i>S. viscosum</i>               | 64  | 1     | -  | -    |
| <i>S. viscosum</i>               | 136 | 4     | -  | -    |
| <i>S. viscosum</i>               | 187 | 1     | -  | -    |
| <i>S. viscosum</i>               | -   | -     | 9  | 2699 |