

# Image Repository 2

## *L.japonicus* final tissue images

### Sample Key

Each sample ID (e.g., O1-T1-R1) follows this structure:

- O#: substrate type (e.g., Martian soil simulant MMS-2 = 1, Quartz sand = 2)
- T#: Treatment (e.g., Inoculated without *Mesorhizobium* = 1, Inoculated with *Mesorhizobium* =2)
- R#: Replicate number (e.g., 1-8 for MMS-2 treatments, 1-6 for sand treatments)

Images are taken after 30 days of plant growth. Roots were washed and brushed clean of excess soil, then dried and photographed on Whatman paper. Images were cut to keep exact aspect ratio, Final size not comparable due to difference in distance of camera. Tissue data can be found in Excel file “Mars\_Plant\_Treatment\_Data”

### General lay out of plant ID in image table.

#### Page 2 *L.japonicus* in MMS-2

O1-T1-R1	O1-T1-R2	O1-T1-R3
O1-T1-R4	O1-T1-R5	O1-T1-R6
O1-T1-R7	O1-T1-R8	

#### Page 3 *L.japonicus* in Quartz sand

O1-T2-R1	O1-T2-R2	O1-T2-R3
O1-T2-R4	O1-T2-R5	O1-T2-R6

#### Page 4 *L.japonicus* in MMS-2 + *Mesorhizobium*

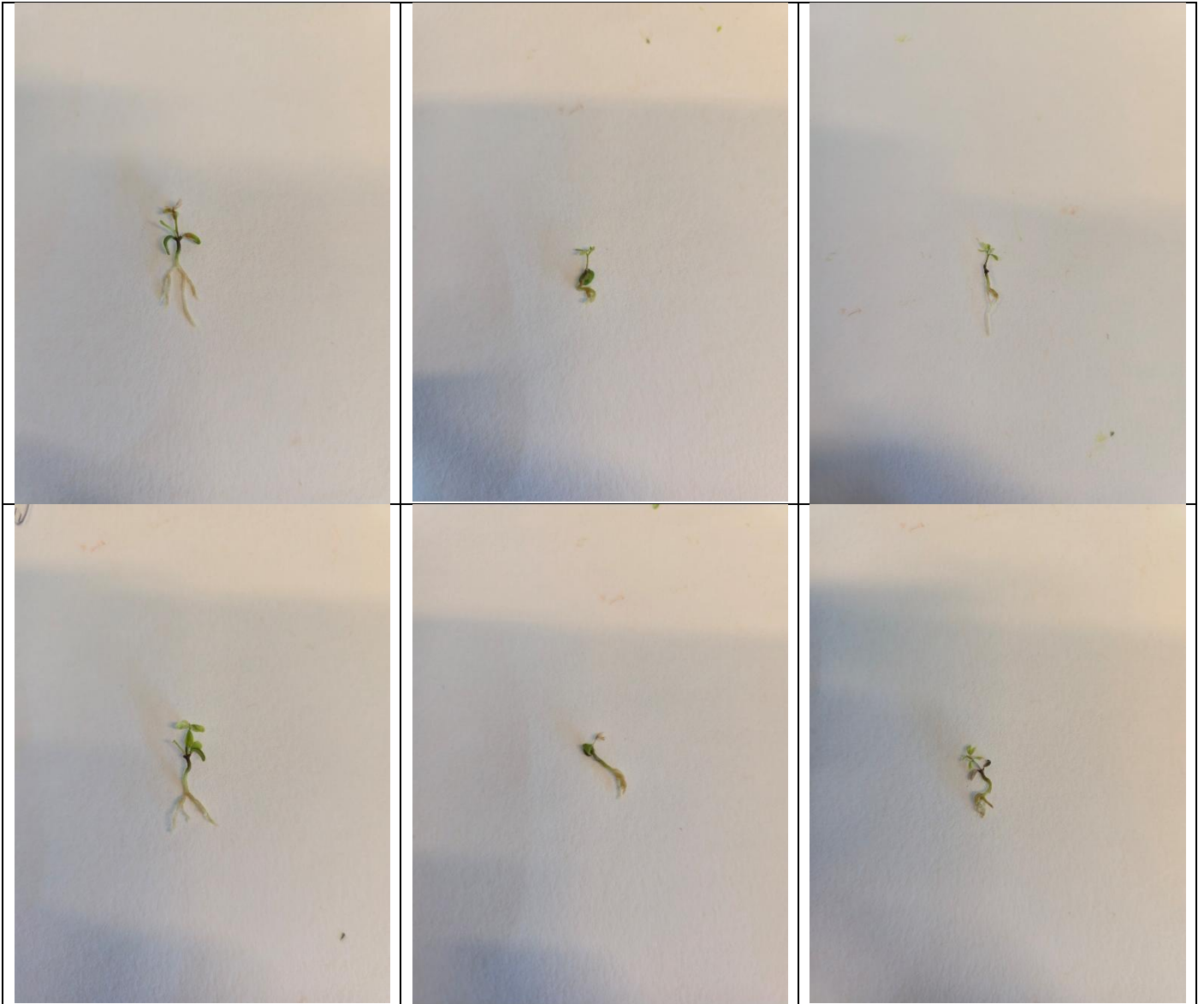
O2-T1-R1	O2-T1-R2	O2-T1-R3
O2-T1-R4	O2-T1-R5	O2-T1-R6
O2-T1-R7	O2-T1-R8 (image lost)	

#### Page 5 *L.japonicus* in Quartz sand + *Mesorhizobium*

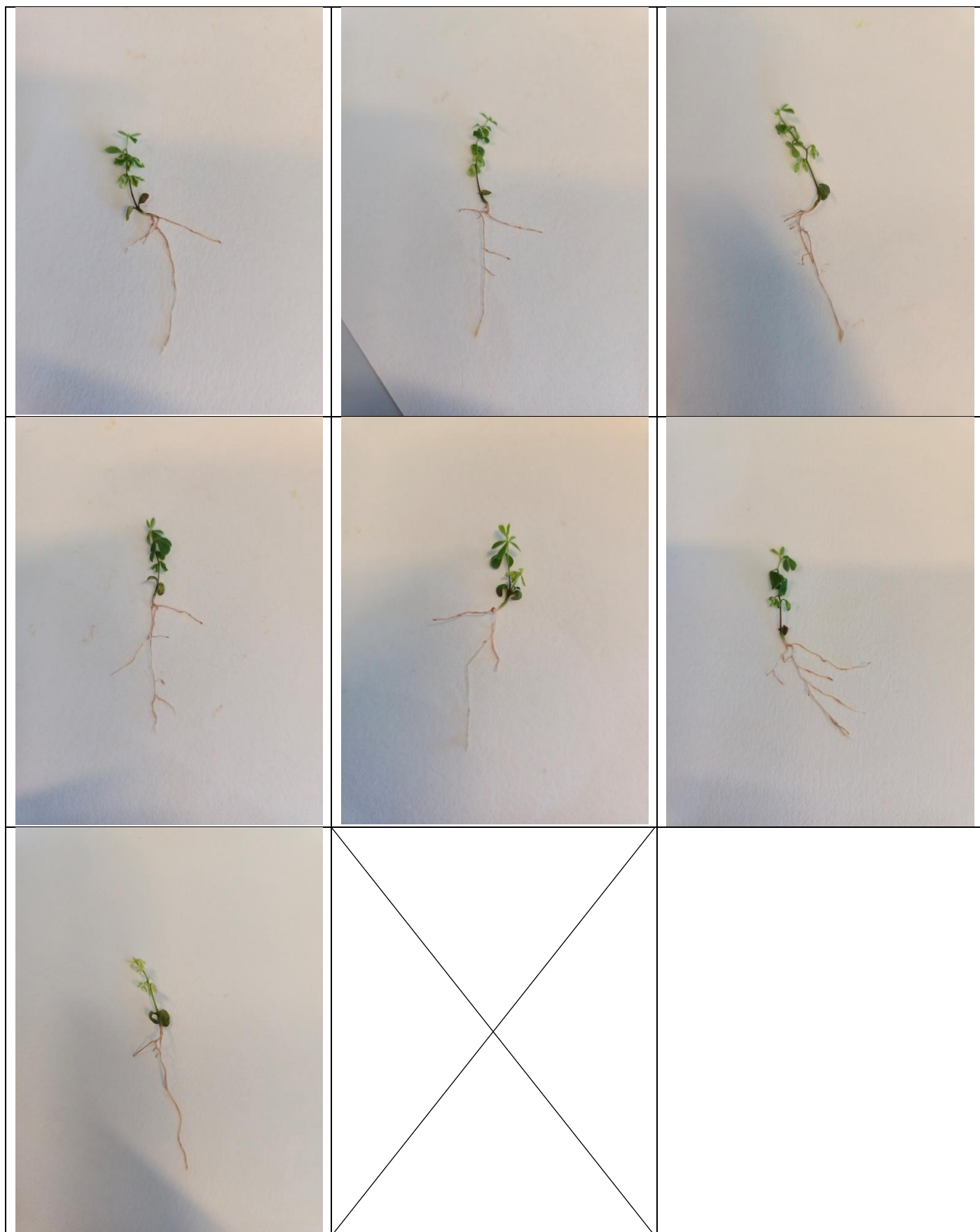
O2-T2-R1	O2-T2-R2	O2-T2-R3 (image lost)
O2-T2-R4	O2-T2-R5	O2-T2-R6



**Figure 1. Images of all *L.japonicus* plants grown on MMS-2 without *Mesorhizobium* inoculation: O1-T1.** From top left to bottom right; R1-R8. All images made after 30 day grow period. Roots washed with tap water and cleaned with brush. Picture taken at roughly the same distance, but not to scale.



**Figure 2. Images of all *L.japonicus* plants grown on quartz sand without *Mesorhizobium* inoculation: O1-T2.** From top left to bottom right; R1-R6. All images made after 30 day grow period. Roots washed with tap water and cleaned with brush. Picture taken at roughly the same distance, but not to scale.



**Figure 3. Images of all *L.japonicus* plants grown on MMS-2 with *Mesorhizobium* inoculation: O2-T1. From top left to bottom right; R1-R7. Replicate O2-T1-R8 image got lost. All images made after 30 day grow period. Roots washed with tap water and cleaned with brush. Picture taken at roughly the same distance, but not to scale.**



**Figure 4. Images of all *L.japonicus* plants grown on quartz sand with *Mesorhizobium* inoculation: O2-T2.** From top left to bottom right; R1-R6. Replicate O2-T2-R3 got lost. All images made after 30 day grow period. Roots washed with tap water and cleaned with brush. Picture taken at roughly the same distance, but not to scale.