Supplemental Figure 1. Installation and assembly details of rainout shelters. (A) individual plastic road barrier, transported using forklift, (B) layout and levelling of road barriers for foundations, (C) one lane of completed road barrier foundations with rails for shelter movement secured atop, (D) lifting and installation of arches onto rails on foundations, using forklift and scissor lift, (E) completion of single rainout shelter frame, (F) self-contained, portable solar panel setup, (G) surveillance camera, (H) digging trenches for drainage pipes installation after completion of all rainout shelter frames, and (I) polyethylene cladding on roof.
Supplemental Figure 2. Architectural design and dimensions of rainout shelter arch. The nine arches acts as the skeleton of rainout shelter, providing support for a waterproof polyethylene sheet roof. The outside of each arch is constructed of five separate sections – two truss bottom chords, two truss ties and one truss arch – which are 50 mm nominal bore (NB) galvanised steel. Two side trussed (each at a 40° angle) and one vertical truss (32 NB) support the external structure.
Supplemental Figure 3. Planting scheme of experimental and border plots in one of the rainout shelters. Each shelter is planted with 42 experimental plots (2 m × 1 m). Border plots (shown in orange) are planted with a filler cultivar at both ends of each range (1 m × 1 m), and continuously along the road barrier foundations (20 m × 0.3 m).