



**Supplementary Fig. A1.** Overall relative abundance of fungal class on SST88 and Kariega rhizosphere (R), and non-rhizosphere (NR) soil at Site A, Kariega rhizosphere (R) and non-rhizosphere soil at site B and Eland rhizosphere and non-rhizosphere soil at Site C wheat growing area. SST88\_A, SST88 rhizosphere soil at Site A; Kariega\_A, Kariega rhizosphere soil at Site A; NR\_A, Non- rhizosphere soil at Site A; Kariega\_B, Kariega rhizosphere soil at Site B; NR\_B, Non- rhizosphere soil at Site B; Eland\_C, Eland rhizosphere soil at Site C; NR\_C, Non-rhizosphere soil at Site C.