

Figure S1 Total numbers of soil nematode and the identification of *Meloidogyne incognita* in cucumber cultivation. C: Cucumber monocropping; CA: Cucumber-amaranth intercropping; WS: Winter-spring season; AW: Autumn-winter season. (a) Total numbers of soil nematode per 100g dry soil. (b) Photo of *Meloidogyne incognita* J2 in soil. Bar: 10μm. (c) The specific SCAR primers MiF/R for *Meloidogyne incognita*. (d) Morphological observed on perineal pattern of female. Bar: 20 μm.

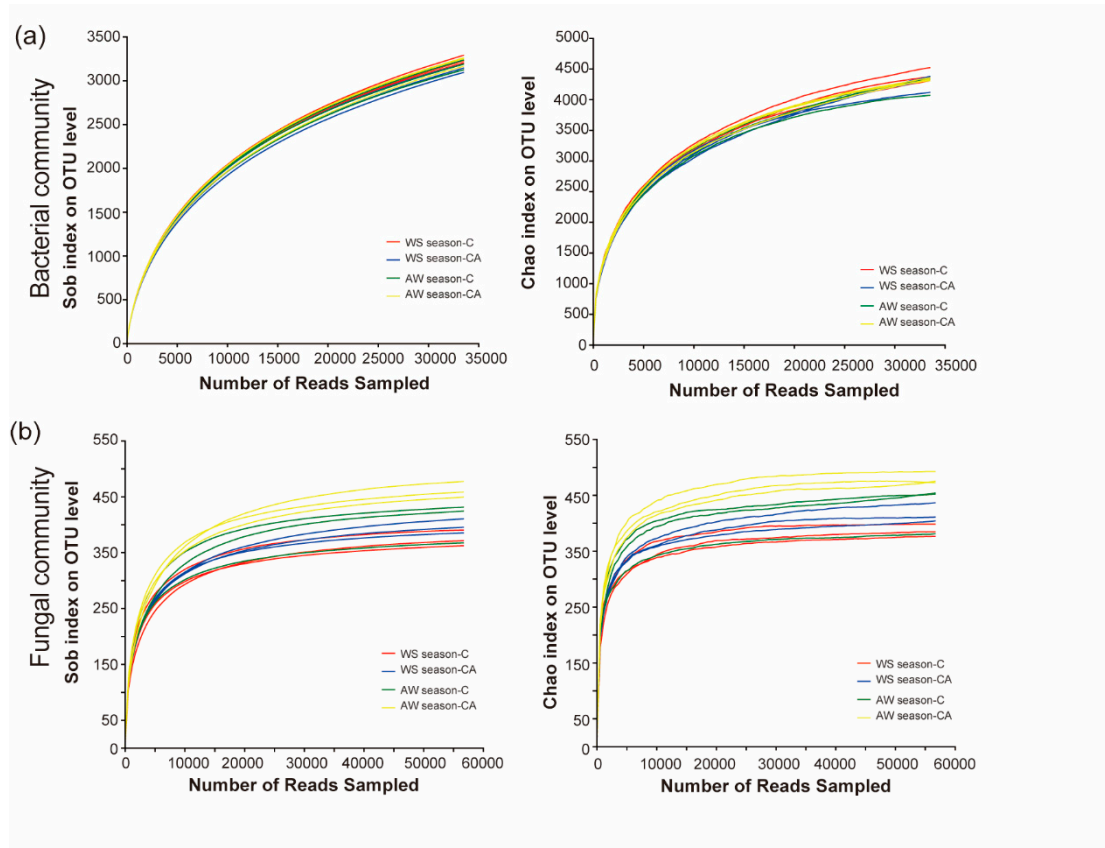


Figure S2 Rarefaction curves of different soil microbial communities. C: Cucumber monocropping; CA: Cucumber-amaranth intercropping; WS: Winter-spring season; AW: Autumn-winter season. (a) Bacterial community; (b) Fungal community.