

Supplementary Table S1. The detail information of five different land use types.

Land use types	Altitude	Longitude	Latitude	Root length reach 20cm	Root length reach 40cm
<i>Zanthoxylum planispinum</i>	517 m	105°39'58"	25°40'07"	yes	yes
<i>Hylocereus spp.</i>	598 m	105°39'41"	25°40'33"	yes	no
<i>Zea mays</i>	600 m	105°39'42"	25°40'33"	yes	no
<i>grassland</i>	851 m	105°28'42"	25°43'48"	yes	no
<i>secondary forest land</i>	798 m	105°28'46"	25°43'48"	yes	yes