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Plant growth-promoting fungus (PGPF) *Alternaria* sp. A13 markedly enhances *Salvia miltiorrhiza* root growth and active ingredient accumulation under greenhouse and field conditions

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Supplementary Information

Table S1 Essential information of the 28 candidates.

Fig. S1 Inhabitats of *Salvia miltiorrhiza*.

Fig. S2 Greenhouse and field experiment of *Salviae miltiorrhiza*.

Table S1 Essential information of the 28 candidates

| Isolates | Habitat | Tissue | GenBank Accession No. |
|---------------------------|-----------------|--------|--------------------------|
| <i>Alternaria</i> sp. A1 | semi-wild | root | MG515036 |
| <i>Alternaria</i> sp. A2 | semi-wild | root | MG515047 |
| <i>Alternaria</i> sp. A3 | semi-wild | root | MG515057 |
| <i>Alternaria</i> sp. A4 | pot-culture | root | MG515058 |
| <i>Alternaria</i> sp. A5 | pot-culture | root | MG515059 |
| <i>Alternaria</i> sp. A6 | pot-culture | root | MG515060 |
| <i>Alternaria</i> sp. A7 | pot-culture | root | MG515061 |
| <i>Alternaria</i> sp. A8 | pot-culture | root | MG515062 |
| <i>Alternaria</i> sp. A9 | pot-culture | root | MG515063 |
| <i>Alternaria</i> sp. A10 | pot-culture | root | MG515037 |
| <i>Alternaria</i> sp. A11 | farmland | root | MG515038 |
| <i>Alternaria</i> sp. A12 | farmland | root | MG515039 |
| <i>Alternaria</i> sp. A13 | farmland | root | MG515040 |
| <i>Alternaria</i> sp. A14 | wild (>2 years) | shoot | MG515041 |
| <i>Alternaria</i> sp. A15 | wild (>2 years) | shoot | MG515042 |
| <i>Alternaria</i> sp. A16 | pot-culture | shoot | MG515043 |
| <i>Alternaria</i> sp. A17 | pot-culture | shoot | MG515044 |
| <i>Alternaria</i> sp. A18 | wild | leaf | MG515045 |
| <i>Alternaria</i> sp. A19 | wild (>2 years) | leaf | MG515046 |
| <i>Alternaria</i> sp. A20 | wild (>2 years) | leaf | MG515048 |
| <i>Alternaria</i> sp. A21 | wild (>2 years) | leaf | MG515049 |
| <i>Alternaria</i> sp. A22 | semi-wild | leaf | MG515050 |
| <i>Alternaria</i> sp. A23 | pot-culture | leaf | MG515051 |
| <i>Alternaria</i> sp. A24 | pot-culture | leaf | MG515052 |
| <i>Alternaria</i> sp. A25 | pot-culture | leaf | MG515053 |
| <i>Alternaria</i> sp. A26 | pot-culture | leaf | MG515054 |
| <i>Alternaria</i> sp. A27 | farmland | leaf | MG515055 |
| <i>Alternaria</i> sp. A28 | farmland | leaf | MG515056 |



Fig. S1 Habitats of *Salvia miltiorrhiza*.

Salvia miltiorrhiza inhabited wild(A), semi-wild(B), farmland(C) and pot-cultured(D).



Fig. S2 Greenhouse and field experiment of *Salviae miltiorrhiza*.

Greenhouse experiment after inoculation 0-month(A); Field experiment after inoculation 4-months(B); *Salviae miltiorrhiza* roots without inoculation cultured for 6-months in the field(C); *Salviae miltiorrhiza* roots after inoculation with A13 cultured for 6-months in the field(D) .