



Figure S1. Figure A B C D shows the images of high-altitude *R. sachalinensis* species. In PingDing Mountain Region of DaHaiLin.



Figure S2. Habitat of *R. sachalinensis* in PingDing Mountain Region of DaHaiLin.



Figure S3. The growth of associated plants under the forest in PingDing MountainRegion of DaHaiLin.