

# Protection and sustainable development on officinal plant resources of Tsinghai-tibet plateau

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Officinal plants of Tsinghai-tibet plateau are the main source of traditional Tibetan medicine. Tibetan officinal products are getting more and more worldwide attentions for its special curative effects. However, rapid development of the industry leads to increasing contradictions between over exploration and natural resource protection of Tibetan officinal plants. (1) It is indicated that snowline in Tsinghai-tibet plateau is roundly shrinking and its glacier will disappear within about 100 years given present rate. One of the serious results is that most of the rare plant resources in Tsinghai-tibet plateau will extinct in the course of great environment changing after glacier disappearing. (2) It is very significant to make researches and carry out measures for protection on officinal plant resources of Tsinghai-tibet plateau. However, for most of these species distributing within special altitudes and growing environment, there will be difficulties in the resource conservation and protection. Primary related researches have been made in recent years in China. (3) Researches on genetic diversity and correlations between plateau ecological factors and these species' bioactive components should be made to provide guidance for the resource conservation. Bio-engineering techniques may be a good way in the sustainable utilization and conservation on officinal plant resources of Tsinghai-tibet plateau.



Seriously endangered *R. kirilowii*



*Saussurea medusa*



Our GAP base in Tsinghai



Fragmented environment for endangered species



*Pedicularis longiflora*



*Halenia ellipteca*



Salt marsh in Tsinghai