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**Collectors of Rhodiola species on the Sichuan-Tibetan and
Sichuan-Shaanxi borders**

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Collectors of *Rhodiola* species on the Sichuan-Tibetan and Sichuan-Shaanxi borders

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Introduction

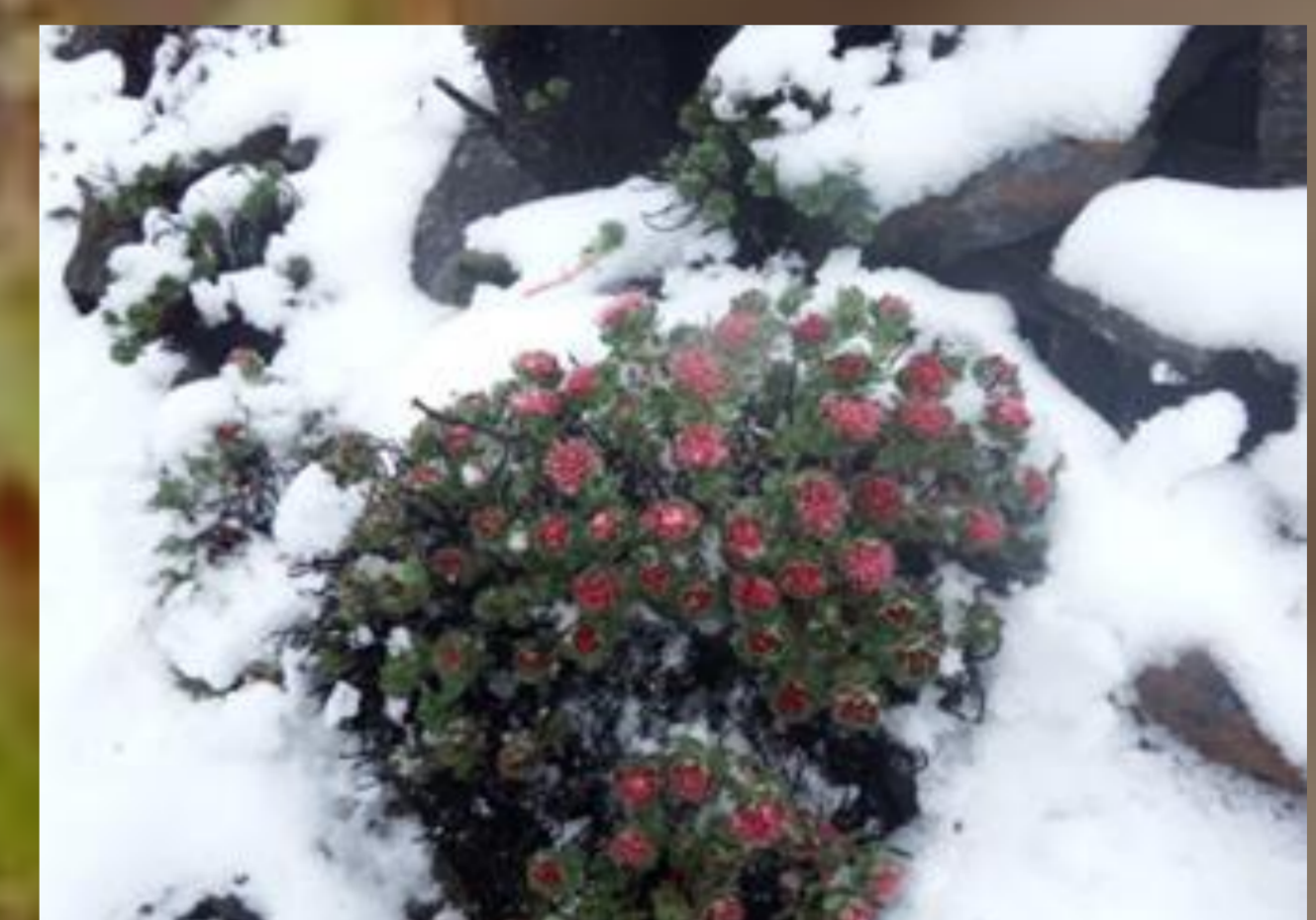
Medicinal *Rhodiola* species, including *Rhodiola rosea* L. and *Rhodiola crenulata* (Hook.f. & Thomson) H.Ohba (*Hongjingtian* 红景天) are widely used as herbal medicines with numerous claims for their therapeutic effects. Tourists from the lower territory in China visiting the Tibetan Kardze Prefecture in Sichuan (*ganzi zhou* 甘孜州) take *Rhodiola* as pills to supplement lacking oxygen in their blood (altitude sickness). These products are registered by a number as pharmaceuticals (*guoyao zhun zi* 国药准字). Throughout China *Rhodiola* is also taken for wellness (*yangsheng* 养生) and is registered as a self-medicated wellness product (*baojianpin* 保健品) for ‘blood-boosting and heart-strengthening.’



R. rosea 红景天



Collection site above 4,000 metres



R. Crenulata 大花红 景天

Because it is harvested for its root - *Rhodiola crenulata* is becoming increasingly difficult to find and each year collectors must travel to more inhospitable places. Faced with resource depletion, environment destruction and higher demand, *R. rosea* and *R. crenulata* are becoming scarce around the world. This scarcity may add to their economic value, but also increases the risk of adulteration and poor quality products (Booker et al. 2015)

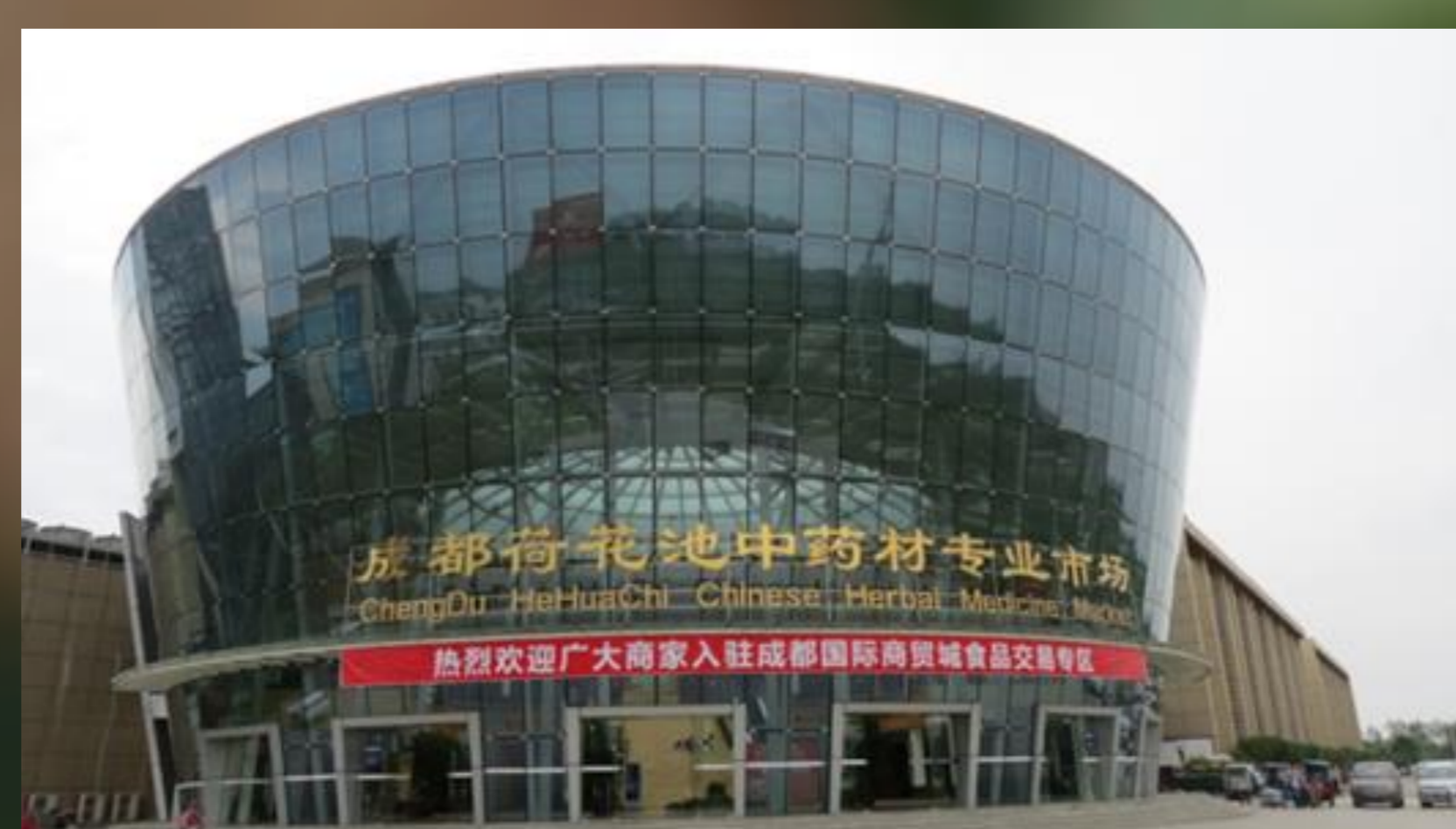
Methods

Data were collected between May and July 2015 using non-participant observation and interviews with collectors, middlemen and TCM market retailers.



Findings

On the Sichuan – Tibetan borders, *R. crenulata* is collected by the Yi minority and represents about one third of their financial income. It is typically dried on the village rooftops and sold at the main market in Chengdu, Sichuan province, one of the ‘pharma-capitals’ in China.



Ethnographic fieldwork in the mountainous border region of Sichuan and Shaanxi “Taibai” shows that *Rhodiola*, *hongjingtian* in Chinese, grows there, too, and is referred to as “Taibai *hongjingtian*” 太白红景天 with the prefix for that region.

Collectors are often not registered (*caoyi* 草医) and a minority that is not an ethnic nationality but self-employed and autodidact.

Furthermore, students at the Shaanxi TCM-University in Xianyang also collect *Rhodiola* in these Taibai mountains. A Taibai *Materia Medica* 太白本草 has been compiled in 2011 at a district hospital in Yangling 杨凌 that provides training to Daoists and traders alike.

Conclusions

A more sustainable way should be found to produce this valuable and culturally significant medicinal plant, e.g. by cultivation or wild-crafting.

This will have benefits both for the minority groups who rely on it for their income and also for the end users who take it as medicine.

References

Booker, A., Jalil, B., Frommenwiler, D., Reich, E., Zhai, L., Kulic, Z. and Heinrich, M. (2015) 'The authenticity and quality of *Rhodiola rosea* products', *Phytomedicine*.



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