

The investigation of Rose planting and Medicinal value in Ping Lang town ,Guizhou Province

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Abstract

In order to get data of rose planting resources and medicinal value, we investigated the varieties, medicinal value and planting scale of rose flowers in Ping Lang town of Guizhou province by data analysis, questionnaire survey and interviews with key persons. It is found that the rose which planted in Ping Lang has long growing season, high yield, drought and water logging and special honey like fragrance. The rose has the functions of regulating qi, promoting blood circulation and convergence, and it can also be used for relieving alcohol, preventing halitosis and treating oral ulcers. The usage is not recorded in the traditional medicine books, which worthy to further investigation and research.

Keywords

Rose ; Ping Lang town, planting resources, medicinal value.

1. Back ground

Rosa rugosa Thunb. It is a Rosa rose plant of the Rosaceae, which enjoys sunny weather, drought resistant, cold resistant, preference of well drained and fertile loam. Guizhou is a subtropical humid monsoon climate with raining a lot, and less sunshine time and annual relative humidity above 70%. Therefore, traditional experience think the Guizhou is not suitable for Rose growth .After consulting the reference [1-3], it was found that the major plant records did Guizhou is not included as the main origin of roses.

Relevant medical book records that rose has the functions of regulating Qi and good for blood circulation, main treatment of irregular menstruation, stroke injury, liver and stomach pain, breast swelling and pain [4,5] . In Qiannan Buyi and Miao Autonomous Prefecture ,Guizhou Province which located in southwest of China, There are lots of minority aggregated villages. Buyi village preference of planting roses around their house, usually mainly as ornamental plants, can also be made of rose tea, which could drink as tea. The reference shows that rose cousins Rosaceae (*Rosa Roxburghii* Tratt.) silk flower, is widely distributed in Guizhou, the people in Guizhou like to eat it`s fruit which called “Cili fruit”, and one of famous Buyi folk named “Haohuagong” means the red flow is excellent . The lyrics sung "Haohuahong , excellent flow growing up in Cili shrub". Therefore, It is possible to exist a kind of rose which adapt for the weather of Guizhou, which is rain a lot , and the sunshine time is short . After investigation, it was found that roses planted in Ping Lang town of Buyi and Miao Autonomous Prefecture of Qiannan in Guizhou province are suitable for local rose in Guizhou Province, with characteristics of long flowering period, high yield, drought and flood resistance, and special honey like fragrance. The variety has many characteristics and is worthy to development deeply. Therefore, it is necessary to have a deep field investigate on this kind of rose .

2. Research method

In order to get first-hand information on the medicinal value of roses in Pinglang Town, Guizhou province, there are mainly two field investigation methods, one is questionnaire survey and the other is key persons interviews.

2.1 Questionnaire survey

Choose several Ping Lang family randomly as participants. The questions of survey mainly involved the local people's understanding of the growing environment of roses, the usage methods of roses, the medicinal value of roses, and the history of planting roses. By the situation of less education, illiteracy is very common, so investigators ask questions to the interviewees, and record the respondent's answers.

2.2 Key persons interviews

According to the information provided by the villagers, we determined two key persons. One is a famous local folk doctor, the other is a main technicians of the planting base of Ping Lang rose. The Investigation content includes sources of rose varieties, planting status of roses, planting conditions of roses, medicinal value of roses, methods of using roses and related products of roses.

3. Results and analysis

3.1 Varieties and planting of roses in Ping Lang Town

The result of questionnaire survey: Survey sample included 13 families, average age is 64 years old, the occupation ratio of Buyi people, Miao people, Han people is 46%, 15%, 38%, the education level of most people is primary school. The result shows that 53% of interviewers grew rose as an ornamental plant, but have no idea about the varieties of rose. Some source of rose comes from their ancestors, and some source of rose comes from their neighbor. So we can't make sure the variety of these roses.

Key persons interviews: The main technicians of the planting base of Ping Lang rose said that the varieties of Ping Lang rose base is "Honey taste edible rose" which breeding and domestication of new varieties in Guizhou mountain area, and now is applying for new varieties protection. The scale of planting area is about 200 acres. The characteristics of Guizhou Honey taste edible rose are (1) Strong adaptability, (2) high yield and long florescence, the florescence period from April to December, Yield per acre can reach 1000 Kilogram. While normal varieties of rose florescence period from May to August, and yield per acre just 250-750 Kilogram. (3) The unique honey flavor is distinctive, (4) Strong resistance to disease and insect pests. This kind of rose comes from wild field, so it's have a strong ability to resist disease and pests, so that can reduce the use of pesticide, which is environment-friendly. (5) High water content, normal rose content of water from 72-80%, however Guizhou Honey taste edible rose contents about 85% of water, so it's easy to make drinks.

3.2 Rose medicinal value

Table 1 Traditional Chinese Medical books record the medical value of rose

Curative effect Object	Invigorate the circulation of blood	Relieve pain	Gynecologic diseases	Deodorant	Protect the liver	Bruises	To stop diarrhea	Ulcer	Alleviate a hangover	Anticorrosive	Cosmetology	Breast disease
Chinese pharmacopoeia	/	/	/		/	/						
Herb Food		/			/	/						
Drug properties investigation	/					/						
True Meaning of the Herbal Foundation	/				/							
Compendium of Materia Medica pickups	/											
New Materia Medica					/							
Recipes of rest and food	/				/							/
Modern edible Chinese Medicine			/				/					
Shandong traditional Chinese Medicine							/	/				
Mirror of herb medicine												/
Siheting Prescriptions			/		/							
Quanzhou herb	/				/						/	
Investigation result	/		/	/	/	/		/	/	/	/	/
Total	7	2	4	1	8	4	2	2	1	1	2	3

It is very clear that the effect of invigorate the circulation of blood and liver protect is acknowledged widely ; the cure effect of gynecologic diseases, bruises and breast disease is also be mentioned by some books. However, the effect of anticorrosive, deodorant and alleviate a hangover is the first time it was mentioned. According to interviewer , rose tea can raise ones capacity for liquor obviously, People who capacity for liquor 400 ml, if he drink rose tea during the drinking process, the amount of wine can be raised to 750 ml, almost doubling. While drinking rose tea can make a fresh breath and remove halitosis; Adding roses to the food can improve the quality guarantee period.

4. Conclusion and Prospect

The rose varieties cultivated in Ping Lang town are mainly Guizhou native varieties of "Honey taste edible rose ", and the common rose varieties are drought resistant and cold resistant, and are afraid of waterlogging. But Guizhou honey rose is adapted to the rainy and lack of sunny climate in Guizhou. The annual average sunshine time is less than other major rose planting areas in China, and the rainfall is 1.5-4 times than other planting areas, the yield per acre is still larger than other rose planting areas. It can be seen that the variety of honey rose planted in Ping Lang town has good popularization value in Guizhou Province, and it is worth further study.

Table 2 The weather compare between Ping Lang and other Rose planting areas.

Location	Annual mean temperature(°C)	Average annual rainfall(ml)	Annual average sunshine hours
Ping Lang, Guizhou	15.7	1340	1100
Ku Shui, Gansu	8.1	280	2659
Pingyin, Shan dong	13.6	640	2371.2
Anning, Yunnan	14.9	1000.5	2327.5

The results of this investigation verified the pharmacological rose effects of invigorate the circulation of blood and liver protection. Meanwhile, it was also found that the effects of rose as a sober, antiseptis and halitosis were not recorded in any literature, which is worthy of further research and exploration.

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