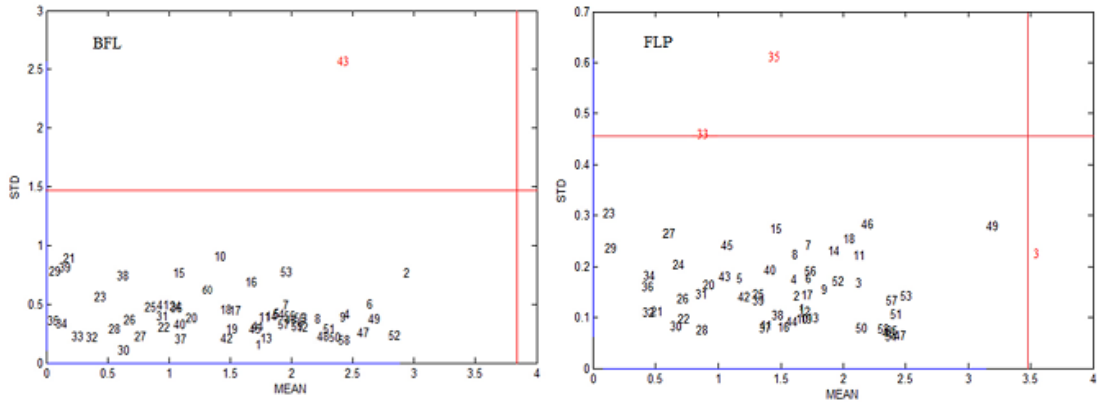


**Application of variable selection in the origin discrimination of *Wolfiporia cocos***

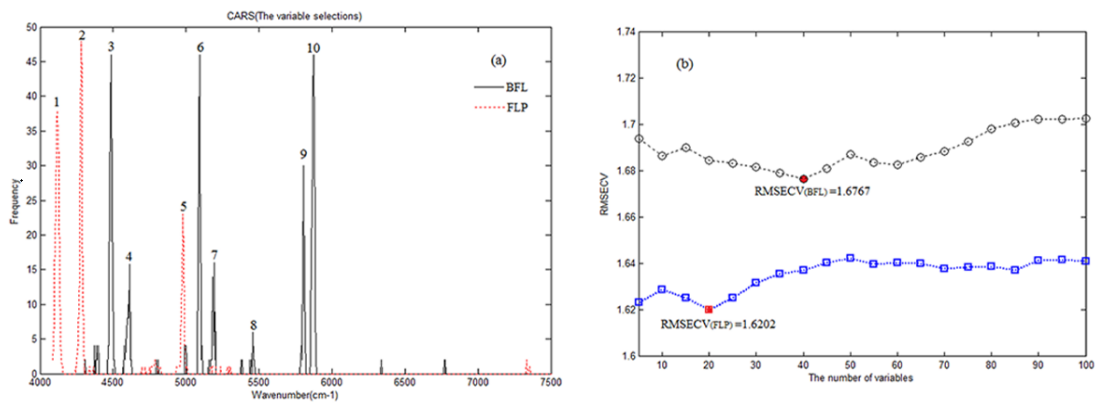
**(F.A. Wolf) Ryvardeen & Gilb. based on near infrared spectroscopy**

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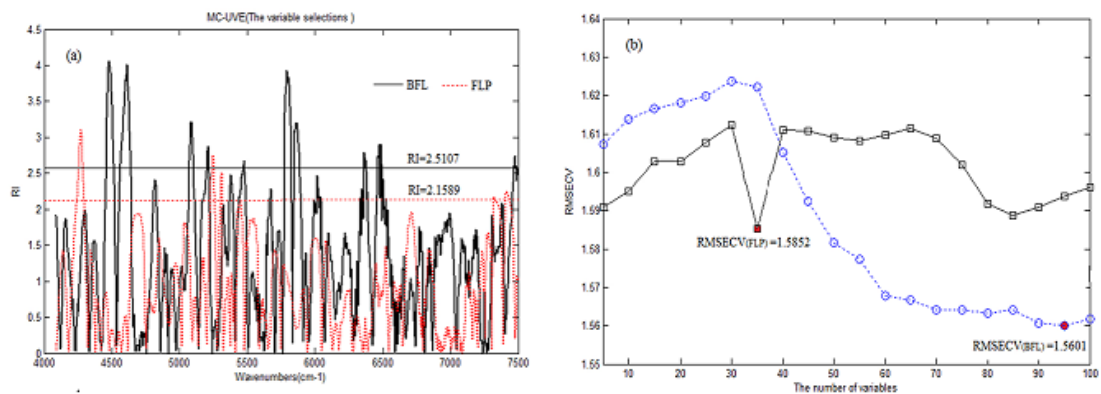
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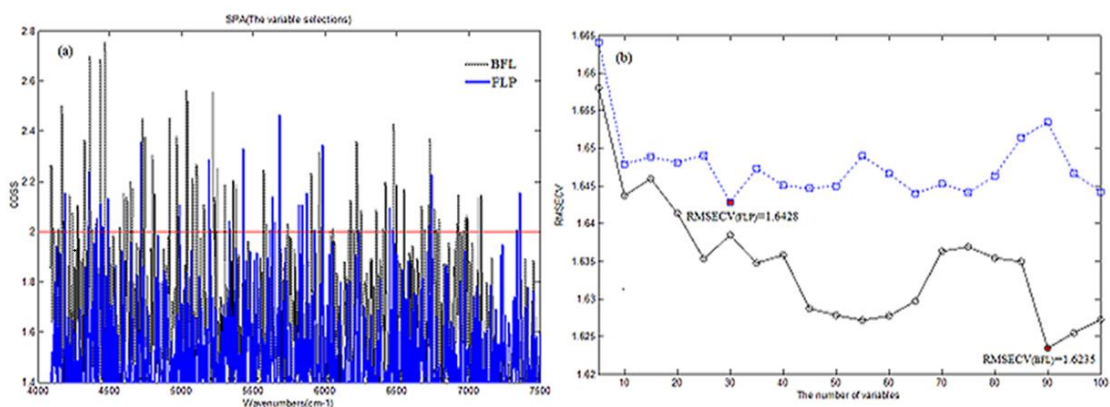
**Supplementary Figure S1** Singular sample diagnosis. The number of samples 43 of BFL, 3, 33 and 35 of FLP were diagnosed as singular samples.



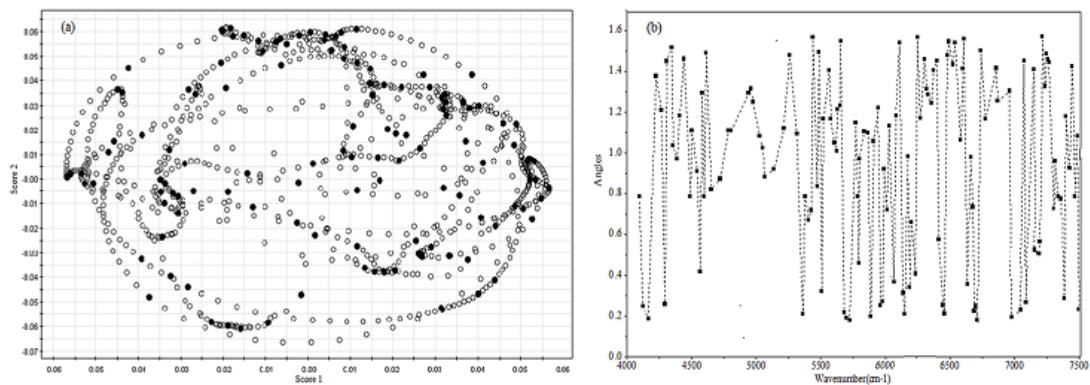
**Supplementary Figure S2** The selected frequency (a) and number (b) of variables of BFL and FLP by CARS. The selected wavelengths were mainly distributed in three regions marked by 1, 2 and 5 for FLP, and seven regions denoted by 3, 4, 6, 7, 8, 9 and 10 for BFL, respectively.



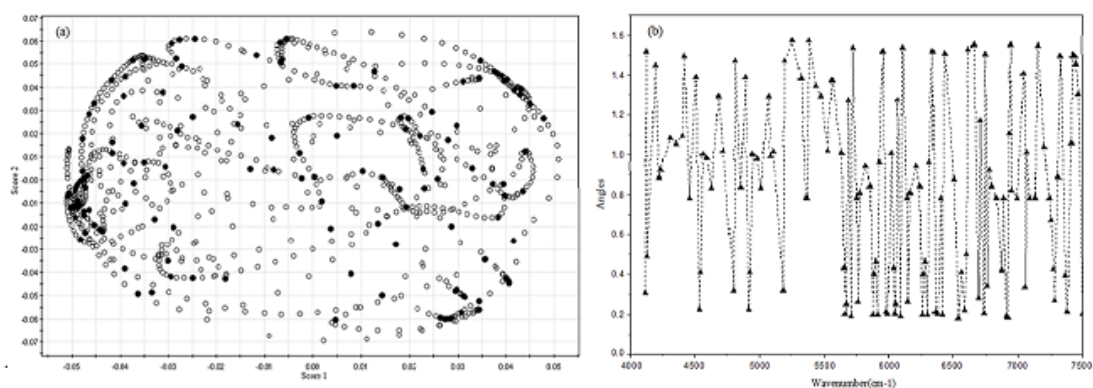
**Supplementary Figure S3** RI threshold (a) and selected number (b) of variables of BFL and FLP by MC-UVE. The variables with the RI values greater than the thresholds were selected.



**Supplementary Figure S4** COSS values (a) and selected number (b) of variables of BFL and FLP by SPA. The variables with COSS values greater than 2 were selected.



**Supplementary Fig. S5** LPG (a) and the selected variables (b) of BFL. Fig. S5a showed the LPG (score 1 vs. score 2) of BFL, in which the solid dots were the variables at the inflections. Fig. S5b demonstrated the sites of the selected variables in the actual spectrum.



**Supplementary Fig. S6** LPG (a) and the selected variables (b) of FLP. Fig. S6a showed the LPG (score 1 vs. score 2) of BFL, in which the solid dots were the variables at the inflections. Fig. S6b demonstrated the sites of the selected variables in the actual spectrum.

**Supplementary Table S1** Selection of the number of principal component

Component	Initial eigenvalues			Initial eigenvalues		
	Total	% of variance	Cumulative %	Total	% of variance	Cumulative %
		of BFL	of BFL		of FLP	of FLP
1	13.22	65.488	65.488	20.281	59.047	59.047
2	3.368	16.69	82.178	7.724	22.487	81.534
3	1.817	8.999	91.177	2.637	7.678	89.212
4	1.149	5.688	96.865	1.644	4.787	93.999
5	1.050	0.993	97.858	1.101	3.204	97.203

**Supplementary Table S2** Detail information of *Wolfiporia cocos* samples from Yunnan Province.

Number	Collection sites	Classification	Number	Collection sites	Classification
FL-01	Yuan jiang, Yuxi	1	FL-31	Eshan, Yuxi	1
FL-02	Yuanjiang, Yuxi	1	FL-32	Eshan, Yuxi	1
FL-03	Jianshui, Honghe	5	FL-33	Nanhua, Chuxiong	2
FL-04	Luxi, Honghe	5	FL-34	Xinping, Yuxi	1
FL-05	Xinping, Yuxi	1	FL-35	Xincun, Chuxiong	2
FL-06	Shangri-La, Diqing	3	FL-36	Xinping, Yuxi	1
FL-07	Shangri-La, Diqing	3	FL-37	Zhenyuan, Pu'er	4
FL-08	Shangri-La, Diqing	3	FL-38	Mojiang, Pu'er	4
FL-09	Shiping, Honghe	5	FL-39	Xinping, Yuxi	1
FL-10	Zhenyuan, Pu'er	4	FL-40	Luquan, Kunming	1
FL-11	Tengchong, Baoshan	2	FL-41	Jingdong, Pu'er	4
FL-12	Ninglang, Lijiang	3	FL-42	Daguokou, Chuxiong	2
FL-13	Mile, Honghe	5	FL-43	Jingdong, Pu'er	4
FL-14	Shiping, Honghe	5	FL-44	Xinping, Yuxi	1
FL-15	Zhenyuan, Pu'er	4	FL-45	Zhenyuan, Pu'er	4
FL-16	Shiping, Honghe	5	FL-46	Shuangbai, Chuxiong	2
FL-17	Shiping, Honghe	5	FL-47	Jingdong, Pu'er	4
FL-18	Jianshui, Honghe	5	FL-48	Eshan, Yuxi	1
FL-19	Shiping, Honghe	5	FL-49	Shuzuo, Chuxiong	2
FL-20	Eshan, Yuxi	1	FL-50	Eshan, Yuxi	1

Number	Collection sites	Classification	Number	Collection sites	Classification
FL-21	Shiping, Honghe	5	FL-51	Nanhua, Chuxiong	2
FL-22	Shiping, Honghe	5	FL-52	Shuangbai, Chuxiong	2
FL-23	Kaiyuan, Honghe	5	FL-53	Xinping, Yuxi	1
FL-24	Jianshui, Honghe	5	FL-54	Shuangbai, Chuxiong	2
FL-25	Shiping, Honghe	5	FL-55	Dadiji, Chuxiong	2
FL-26	Jinggu, Pu'er	4	FL-56	Zhenyuan, Pu'er	4
FL-27	Eshan, Yuxi	1	FL-57	Xinping, Yuxi	1
FL-28	Xinping, Yuxi	1	FL-58	Xinping, Yuxi	1
FL-29	Xishelu, Chuxiong	2	FL-59	Xinping, Yuxi	1
FL-30	Bajiao, Chuxiong	2	FL-60	Weixi, Diqing	3

Note: The classification “1” represents the Central of Yunnan; “2” represents the western Yunnan; “3” represents the northwestern Yunnan; “4” represents the southwestern Yunnan; “5” represents the southeastern Yunnan.