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Organic Acids of *Gentianaceae* Sp.

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Gentianaceae plants are widely used in Tibetan medicine. There are no literature data about organic acid contents. We have investigated organic acids of some *Gentianaceae* species (*Anagallidium*, *Gentiana*, *Gentianella*, *Gentianopsis*, *Halenia*, *Lomatogonium*) [1].

Species	Acids contents, %			K_f
	summ.	in free form	in bonded form	
Anagallidium dichotomum (L.) Griseb.	4.30	0.80	3.50	1: 4.37
Gentiana algida Pall.	4.11	1.45	2.66	1: 1.84
Gentiana decumbens L.	5.46	2.01	3.45	1: 1.72
Gentiana grandiflora Luxm.	4.62	2.09	2.53	1: 1.21
Gentiana macrophylla Pall.	3.63	1.14	2.49	1: 2.18
Gentiana pseudoaquatica Kusn.	5.10	1.47	3.63	1: 2.47
Gentiana squarrosa Ledeb.	5.03	1.58	3.45	1: 2.18
Gentiana triflora Pall.	4.15	1.56	2.59	1: 1.66
Gentianella acuta (Michaux.) Hiit.	3.67	1.02	2.65	1: 2.60
Gentianella azuria Bge.	3.55	1.72	1.83	1: 1.06
Gentianopsis barbata (Froel.) Ma.	3.40	1.66	1.74	1: 1.05
Halenia corniculata (L.) Cornaz.	5.25	2.32	2.93	1: 1.26
Lomathogonium carinthiacum (Wilf.) Reichenb.	4.49	1.40	3.09	1: 2.21
Lomathogonium rotatum (L.) Fries. Ex Fern.	2.90	1.05	1.85	1: 1.76

Common contents of organic acids in *Gentianaceae* species are from 2.90 (*Lomatogonium rotatum*) to 5.46% (*Gentiana decumbens*). Mainly acids present in bonded (salt) form (51.18-81.39%). Comparison of form's coefficient ($\boldsymbol{K_f} = X_{free}:X_{bond}$) showed, that all investigated species are divided on three groups:

- 1:1.00-1.30 - Gentianella azuria, Gentianopsis barbata, Gentiana grandiflora, Halenia corniculata;
- 1:1.31-3.00 - Gentianella acuta, Gentiana algida, G. decumbens, G. macrophylla, G. pseudoaquatica, G. squarrosa, G. triflora, Lomatogonium carinthiacum, L. rotatum;
- 1:3.01 and more – Anagallidium dichotomum.

Investigations of Gentianaceae organic acids are continued.

References

1. D.N.Olennikov, L.M.Tankhaeva, G.G.Nikolaeva, *Rast. Res.* (in press).