

CAROTENOIDS FROM LEAVES OF *Mimosa biuncifera*

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UDC 547.912:635.71

The limited nature of the pastures in the subtropical regions of Georgia has led to interest in the use as feedstuff of wild-growing evergreen bushy stands. Catclaw mimosa is a bush 1.5-2.0 m high with spreading branches and the voluminous growth of green mass.

The carotenoids were extracted from the green mass with ethanol and petroleum ether. The total amount of carotenoids was determined as described in [1] as 36.1 mg per 100 g of dry matter.

The combined carotenoids were separated by column and thin-layer chromatography into individual substances, which were identified by procedures published previously, together with literature information [2-4]. The results of the investigation are given in Table 1, from which it can be seen that 67.6% of the total carotenoids consisted of β -carotene. Of carotenoids possessing provitamin A activity, neoxanthin, which is a frequent associate of the xanthophylls of green leaves, was present in the largest amount.

TABLE 1. Carotenoids of the Leaves of Catclaw Mimosa

Carotenoid	Amount	
	% on the total	mg in 100 g of dry mass
β -Carotene	67.6	24.40
β -Zeacarotene	1.0	0.36
Z-Carotene [sic]	5.2	1.90
Cryptoxanthin	0.8	0.29
Lutein	0.9	0.32
Lutein epoxide	2.6	0.94
Violoxanthin	6.6	2.38
Taraxanthin	3.2	1.15
Luteoxanthin	1.8	0.65
Neoxanthin	10.3	3.71

LITERATURE CITED

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1987; revision submitted September 18, 1987.