Rastitelnye Resursy. 53(1): 51—59, 2017

SOME DEVELOPMENT FEATURES AND CONTENT OF INDOLE-3-CARBINOL IN *ERUCASTRUM ARMORACIOIDES* AND *BRASSICA OLERACEA* VAR. *ITALICA* (BRASSICACEAE) IN PREGENERATIVE PERIOD OF ONTOGENESIS

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SUMMARY

The development rate of *Erucastrum armoracioides* (Czern. ex Turcz.) Cruchet at the seedling, juvenile, immature stages is lower than of *Brassica oleracea* var. *italica* Plenck. However, on the 40-th day of immature stage, wet weight of the aerial parts of these species is almost equal, but the dry mass of *E. armoracioides* is twice the dry mass of *B. oleracea* var. *italica*. We also compared content of indole-3-carbinol in *E. armoracioides* and *B. oleracea* var. *italica* in pregenerative period of development. The largest content of indole-3-carbinol was in the 40-day plants in both species. The content of indole-3-carbinol in the aerial part of the *E. armoracioides* were 7—10 times higher (4-day — 0.249 umol/g, 10-day — 0.379 umol/g, 40-day — 0.413 umol/g), than that of *B. oleracea* var. *italica* (4-day — 0.023 umol/g, 10-day — 0.038 umol/g, 40-day — 0.070 umol/g) in all stages of plant development that were studied. *E. armoracioides* is enough drought-resistant species, grows on ruderal habitats and in the fields, as weed, thus it is easy to grow. Thus, *E. armoracioides* is more promising source of raw material for producing indole-3-carbinol-based medical drugs than the currently used *B. oleracea* var. *italica*.

Key words: *Erucastrum armoracioides*, *Brassica oleracea* var. *italica*, glucosinolates, indole-3-carbinol (I3C), broccoli, Southern Urals.