

DISTRIBUTION, PLANT COMMUNITIES, AND ECOPHYSIOLOGY OF *CAKILE EDENTULA* (BRASSICACEAE), AN INVASIVE ALIEN SPECIES IN PRIMORYE TERRITORY, RUSSIAN FEDERATION

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Received August 3, 2021; revised October 27, 2022; accepted November 20, 2022

We studied the distribution and relationship with the indigenous supra-litoral species of the North Atlantic species *Cakile edentula* (Bigelow) Hook. along the eastern coast of Primorye Territory. The *C. edentula* annual community usually occupies sandy beaches and outer ribs of front dunes free of vegetation. This species is also associated with different plant communities of beaches and dunes: *Salsolietum komarovii*, *Elymo-Caricetum kobomugi*, *Elymo-Caricetum pumilae*, *Artemisio stellerianae-Leymetum mollis*, and *Ley-mo mollis-Glehnetum littoralis*. Furthermore, it forms short-lived communities with *Jacobea pseudoarnica*, *Lathyrus japonicus*, and *Rosa rugosa* in some parts of the coast, and also communities with *Phragmites australis* on salt marshes in the Tumen River estuarine zone. The functional traits of *C. edentula* leaves - volume of mesophyll cell, the number of chloroplasts per mm² of leaf surface, the ratio of the total surface area cells to the unit leaf area (Ames/A), the total number of chloroplasts per cell - were investigated. The high values of the integral parameters of *C. edentula* leaf mesophyll are quite comparable to those of desert halophytes and 1.5–4 times higher than the values reported for several Northeast Asian coastal species such as *Artemisia stelleriana*, *Chorisia repens*, *Glehnia littoralis*, *Jacobea pseudoarnica*, *Lathyrus japonicus* et al. According to its ecological strategy, *C. edentula* can be attributed to ruderal - stresstolerant (RS) species. This study was based on standard phytosociological and physiological methods with examination of quantitative leaf anatomy.

Keywords: *Cakile edentula*, plant communities, non-indigenous species, naturalization, quantitative leaf anatomy, Peter the Great Bay, Russia.

DOI: 10.35885/1996-1499-15-4-97-100

Full text of the paper is published in Russian Journal of Biological Invasions. DOI: 10.31857/S20751172104XXXXYY

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