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Productivity and quality of *Amaranthus Paniculatus* in mixed crops under irrigation in Kalmykia

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Abstract

The article presents data on the effectiveness of amaranth crop cultivation in mixed plantings of annual grasses under irrigation in the arid climate of the Republic of Kalmykia. Researchers have revealed the most productive crops that can generate two hay crops and are characterized by high levels of quality of aboveground mass. The chemical composition of plant samples has been studied by near-infrared spectroscopy and atomic absorption analysis. It has been established that the cultivation of crops against the background of higher doses of fertilizers increases the content of macro-and microelements in the product.