The aim was to determine the efficacy of spray fertilization on spring barley with liquid organic and mineral fertilizers (OMF) in different agrobackgrounds. Methods: field, laboratory and analytical, statistical. Results: the influence of liquid OMF on yield of spring barley crops in different agrobackgrounds is determined. It is calculated the increase of crop yield from spray fertilization compared to the background. Conclusions: it is determined that the use of liquid OMF during the growing season provides reliable increase of spring barley yield with the optimal number of treatments - 3 (tillering stage, the output in the tube and earing).

Key words: liquid organic and mineral fertilizers, efficiency, spring barley, fertilizing, yield.

References