Annotation

Krotik A.S. Influence of elements of agricultural technologies on the formation of the area of black currant leaves

The article reviews the findings of the investigation on the formation of leaves number, area of one leaf and total area of black currant leaf surface depending on elements of agricultural technologies. As a result of studies, it was found that the maximum number of black currant leaves was formed under the conditions of row spacing under complete fallow and mulching black currant shrubs with straw. Its quantity increased from 1.109 (variant without fertilizers) up to 1760 (ground + 3% Riverm) or by 59%. The minimum number of leaves amounted to 822 units without applying fertilizers or row spacing under complete fallow.

The use of all-nutrient fertilizers significantly increased the leaf surface to $41.0-43.0 \text{ cm}^2$ depending on the nature of growing shrubs. Applying foliar dressing, the leaf surface increased to $41.5-44.5 \text{ cm}^2$ depending on the elements of agricultural technologies. It should be noted that foliage application using Riverm enhanced the indicators to $43.6-46.4 \text{ cm}^2$ or by 26% comparing with the check variant. Using the grassland renovation system, the leaf surface was formed at the level of indicators of row spacing under complete fallow as the number of leaves formed of shrubs was noticeably lesser.

As a result of studies, it was found that the maximum leaf surface of black currants was formed under conditions of row spacing under complete fallow and mulching black currant shrubs with straw. It increased from 31.2 thousand m^2 (variants without fertilizers) up to 50.2 thousand m^2 (ground + 3% Riverm) or by 61%. The minimum leaf surface of black currants amounted to 20.1 thousand m^2 without applying fertilizers or row spacing under complete fallow. Foliage application + $N_{60}P_{90}K_{90}$ under conditions of row spacing under complete fallow were less effective in comparison with variants of straw and veil mulching. Grassland renovation significantly decreased the leaf surface. However, the above-mentioned tendency of the influence of mulching and fertilizing on this indicator was similar. Applying all-nutrient fertilizer, the greatest influence on this indicator was fixed under the conditions of mulching with straw around shrubs. Thus, it increased from 13.5 thousand $m^2/$ ha (variant without fertilizers) to 19.4 (applying $N_{60}P_{90}K_{90}$) and up to 28.0 thousand $m^2/$ ha (ground + 3% Riverm).

Key words: black currant, elements of agricultural technologies, area of leaf surface.