One of the main components of forming yielding capacity of soybeans sowing is its photosynthetic activity depending on the seed inoculation, mineral nutrition and foliar feeding.

The above contributes to the formation of the optimal leaf area, photosynthetic potential and net productivity of photosynthesis.

It has been proved that on Polissya light grey soils a high photosynthetic activity is manifested under the application of mineral fertilizers $N_{60}P_{60}K_{60}$, the inoculation of seeds and foliar feeding, these providing for the yielding capacity of 3,0 t/ha.

**Key words:** soybeans, inoculation, fertilizers, foliar feeding, productivity of photosynthesis and seed yield.