The invention relates to agriculture, in particular to horticulture, namely to a process for cultivating plum trees. The process, according to the invention, comprises the foliar treatment of trees during the vegetation period, after the fall of juvenile fruits, with an aqueous solution comprising 0.05% extract of biologically active substances obtained from the powdery biomass of the green filamentous alga *Spirogyra* sp. by extraction with ethyl alcohol, as well as 0.05% microelements B, Zn, Mn, Mo, taken in a ratio of 1:1:1:1, and in the pre-harvest period - with an aqueous solution of 0.1% CaCl₂, with a consumption of 800-1000 L/ha.

Claims: 1