

The invention relates to plant production and can be used for selecting the plant species resistant to the effect of metals. A method to determine binding metals in plant tissues includes the treatment of plants with available forms of a metal, to prepare a plant preparation to analysis and to determine the effect of binding a metal according to the spectral parameters of a product of interaction thereof with a chelator of the phenolic type. The distribution of the intensity of a reflected light flow by preparations of the roots of test and control plants is determined depending on the wavelength of irradiation within the ranges of 450-750 nm, differential spectrum is calculated according to a difference of optical density while the wavelength of the test and control samples is the same with an interval of 5-10 nm and in the presence of the maximum in the differential spectrum at 540-670 nm the effect of binding the metal in the plant tissue by the chelator is determined. The technical result is in simplification of the diagnostics of the plant metal-binding ability.