Project Title: Investigations of Plant Growth Regulators Residues on Agricultural Crops in Aegean Region

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Supporting Body: GDAR (General Directorate of Agricultural Research and Policy)

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Summary: Plant Growth Regulators (PGR) or Plant Hormones that produced and transported within the plant, are organic substances. Even a small amount of them controls plant growth and physiological movements. Some of them encourages growth like auxins, cytokinins and gibberellins while the other part prevents like abscissic acid and ethylene.

Application time and concentration of PGR’s of the fine adjustment is required to achieve the desired results in agricultural practices. Using of PGR increases the crop production efficiency, upgrades product quality, gives the resistance to diseases and pests of plants, provides better storage facilities and increase the export chances of products.

In Turkey, certain periods of agricultural practices, some PGR are used. It’s necessary to regular monitoring and comparing with the limits of PGR’s residue levels in end-products.

In this study, various agricultural products grown in the Aegean region, residue levels of plant growth regulators will be investigated. Under this project, the samples that especially grown in greenhouses will analyse in our laboratory by using Q-TOF LC/MS and LC-MS/MS instruments. The samples will taken by BZMAE inspectors and analyzed by IKL analysts.