

Effect of plant biostimulants on the quality of soft fruits.

(project Biostrateg Ecofruits)

The quality of soft fruits depends on their susceptibility to infections caused by fungal pathogens, mainly *Botrytis cinerea*, *Verticillium* sp., *Phytophthora* sp., *Colletotrichum acutatum*. Application of plant biostimulants in the form of consortia belong to the methods which limits losses of these fruits. The specific biostimulants will be developed in the frame of a project EcoFruits under the direction of prof. Magdalena Frąc. The aim of the doctoral thesis will be estimation of the influence of such bioproducts on the quality of soft fruits, mainly strawberries. At the beginning phase of doctoral studies methods of characterisation of microstructure, chemical composition and mechanical properties of strawberries will be developed. Cell walls will be isolated from fruit tissue in order to describe molecular structure. Next part of the project includes application of developed bioproducts on plants in laboratory, growth chamber (fitotron) and field conditions. The result of the doctoral thesis will be evaluation of plant biostimulants on key quality parameters of strawberries in macro- and microscale.

Scientific supervisor: dr hab. J. Cybulska, prof. IA PAN

Profile of the candidate:

- Master of Science degree on chemistry, biology, biotechnology, food science or similar,
- good knowledge on chemistry and biochemistry,
- practical laboratory experience in chemistry,
- high motivation to conduct scientific research
- good communication skills including a very good command of the English language,
- ability to work independent.