Branislav Ž. Nikolić,

Serbian Chemical Society – JSCS,

Karnegijeva Street4,

11120 Belgrade, Serbia

Belgrade, 17.03.2015.

Dear Prof. Nikolić,

Improvement of amylase production by the best known fungal producers *Aspergillus* sp.is still an open biotechnology chapter, due to the extensive use in food, textile and bioethanol industries. In the other hand, still insufficient use of triticale (*xTriticosecale,* *Wittmack*) combined with pre-defined problem led to the realization of this interesting project that we presented in two papers that we submitted at the same time in Journal of the Serbian Chemical Society, with hope that they are suitable for publication in yours journal because it describe a novel way for usage of triticale and in the same time the new principle for fortification of amylases production using known good fungal producers.

The first manuscript entitled “Enhancement of amylase production using carbohydrates mixtures from triticale in *Aspergillus* sp”. Paper describes the impact of carbohydrate mixtures from triticale on production of important industrially enzymes, fungal amylases, for the purpose of finding a suitable inducer. Based on well-known induction mechanisms, it is shown herewith that carbohydrates from triticale extracts can be used as very good cheap and available amylase inducers. Research is based on usage of triticale extract as sole fermentation substrate for fermentations with two the most commonly used fungal strains.

The second manuscript entitled “Production of efficiency *Aspergillus niger* amylase cocktail using triticale grains as a well-balanced substrate”. Herewith we showed extensive study on utilization of triticale grains as substrate for production of special amylase cocktail by *A. niger* under SSF conditions. It relies on first report because it describes practical application of results shown in it. This paper describes the novel approach to fermentation process produces an amylase cocktail which is highly efficient in raw starch hydrolysis (for 29% more than a commercial product, SAN Super 240L). Development, optimization and scale up 10 fold of SSF for simultaneous production of amylase cocktail (α-amylase and glucoamylase) with their isoforms by *A. niger* on triticale grains without adding of any nutritive supplements is shown in this paper. The novel approach to a fermentation process enables to achieve a maximum production of both enzymes – high efficient cocktail for raw starch hydrolysis and it also facilitates control of enzyme ratio in the obtained mixture depending on the industry requirements.

Benefits derived from presented results might be greater use of triticale, otherwise unduly insufficiently used as well as higher fungal amylase production.

All authors concur with the submission and have seen a draft copy of the manuscript and agree with its publication.

The work has not been published elsewhere, either completely, in part, or in another form. Also the manuscript has not been submitted to another journal.

Sincerely,

Dr Biljana Dojnov.

Potential Referees:

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