



# Two-dimensional protein profiling of various soybean (*Glycine max*) products in reference to different hypersensitivities.

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## 1. Introduction

**S**oybean (*Glycine max*) products - high-quality protein, vitamins, minerals, fiber etc. Main part of various diversity of diets such as vegan and vegetarian.

Strongly associated with respiratory diseases and food allergy together with other major foods – wheat, dairy and eggs.

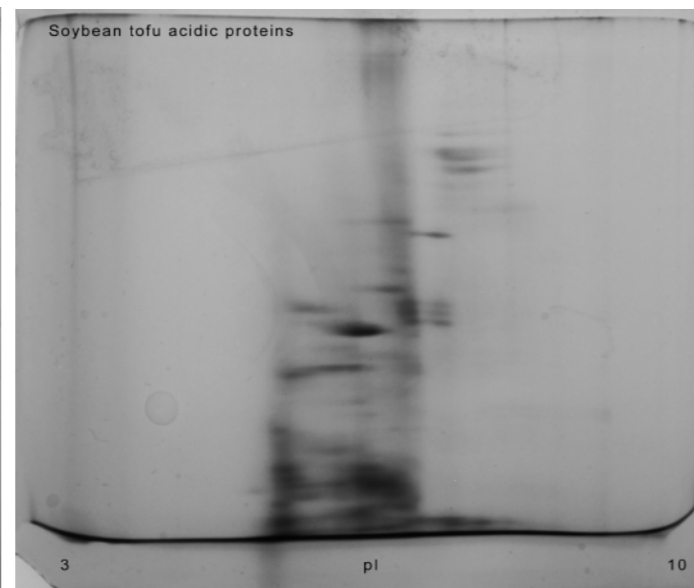
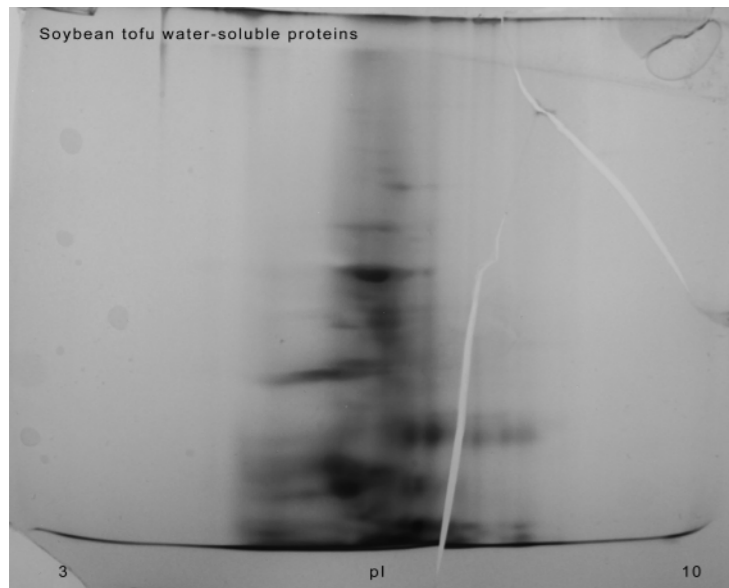
Deeply discussed as allergens amongst the dozen suggested ones (proteases, storage proteins, trypsin-inhibitors) are glycinin and  $\beta$ -conglycinin.



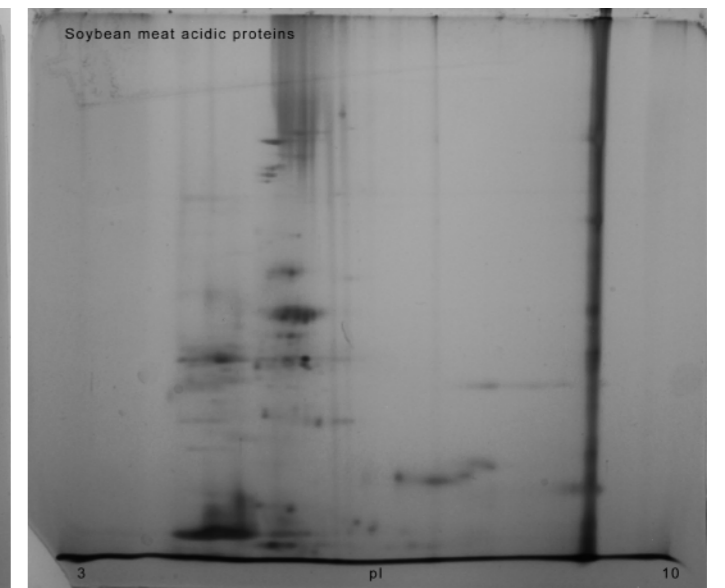
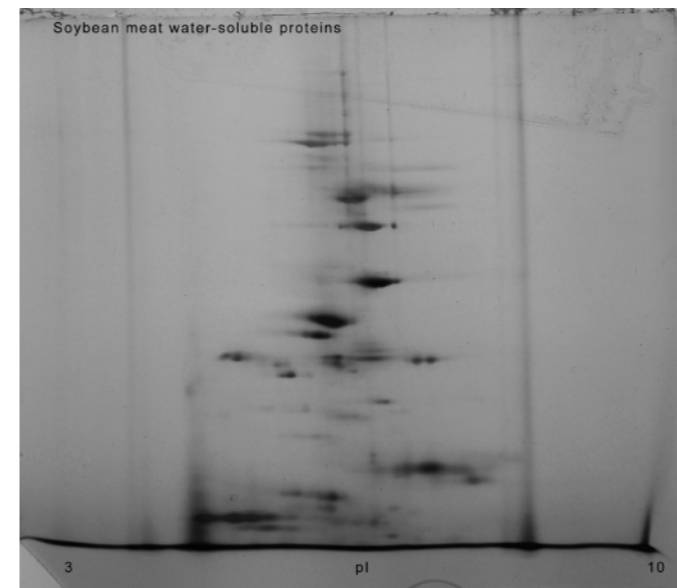
## 2. Aim

The present research aims to provide information on characteristics of soybean allergenic proteins of various soybean products, commercially available on the market.

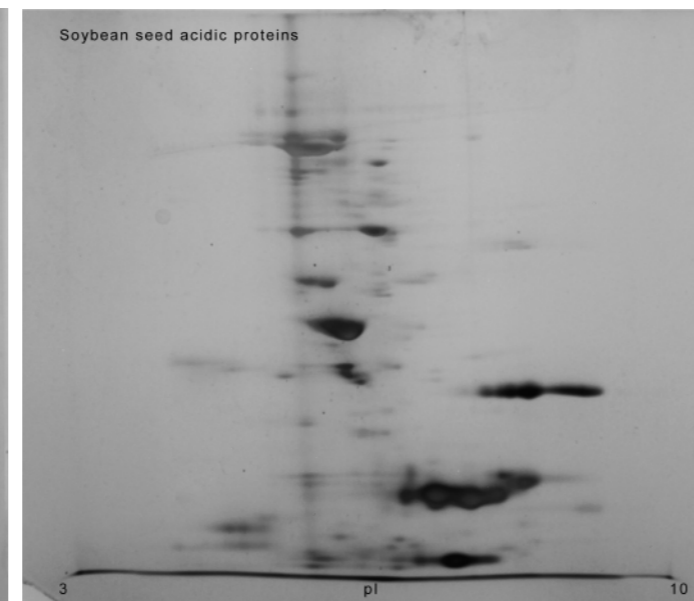
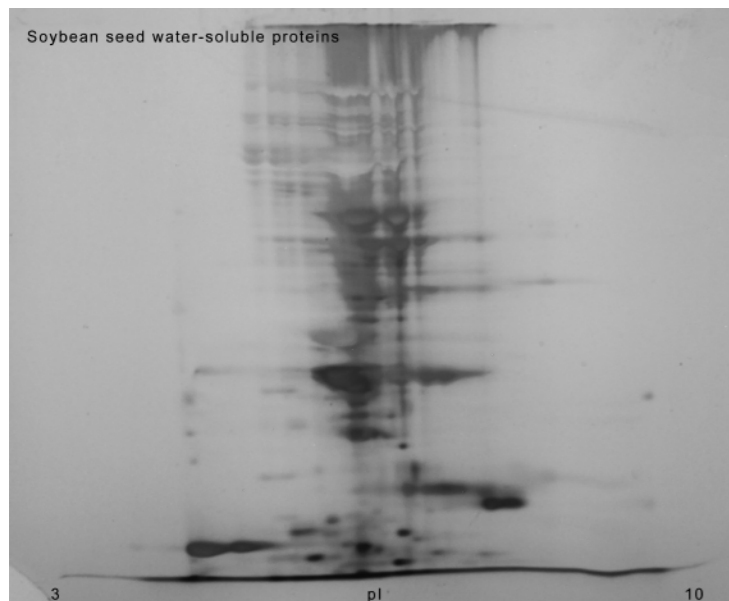
## 3. Results & Discussion



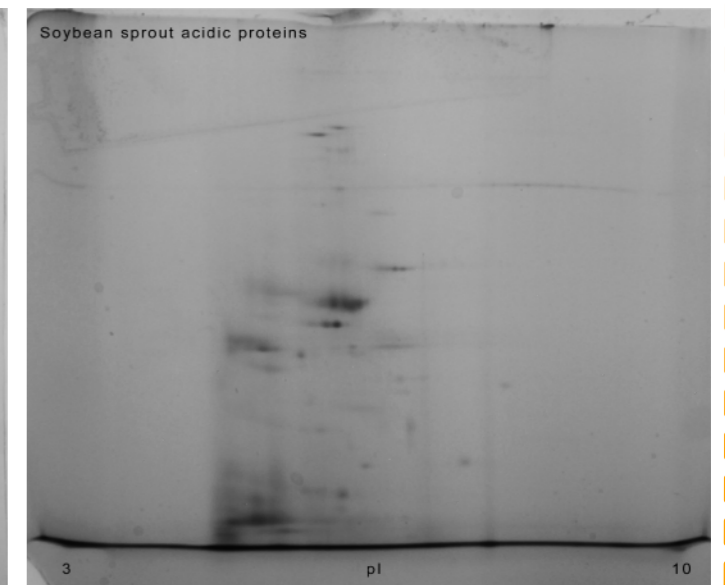
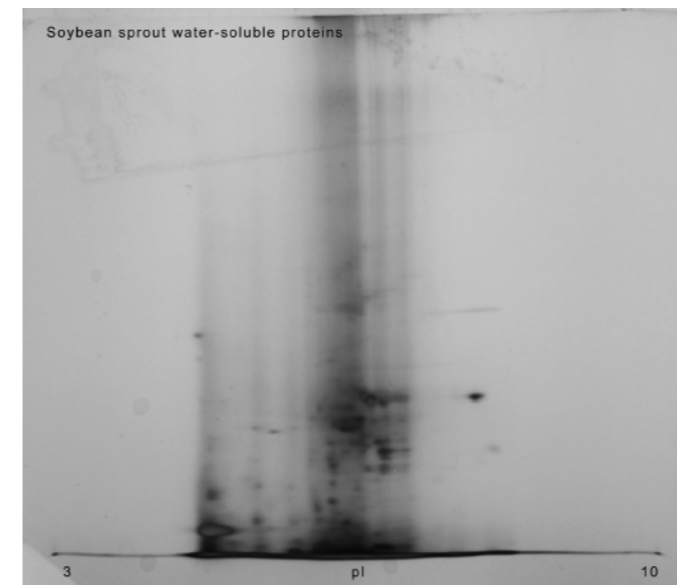
Tofu proteins



Soybean meat proteins

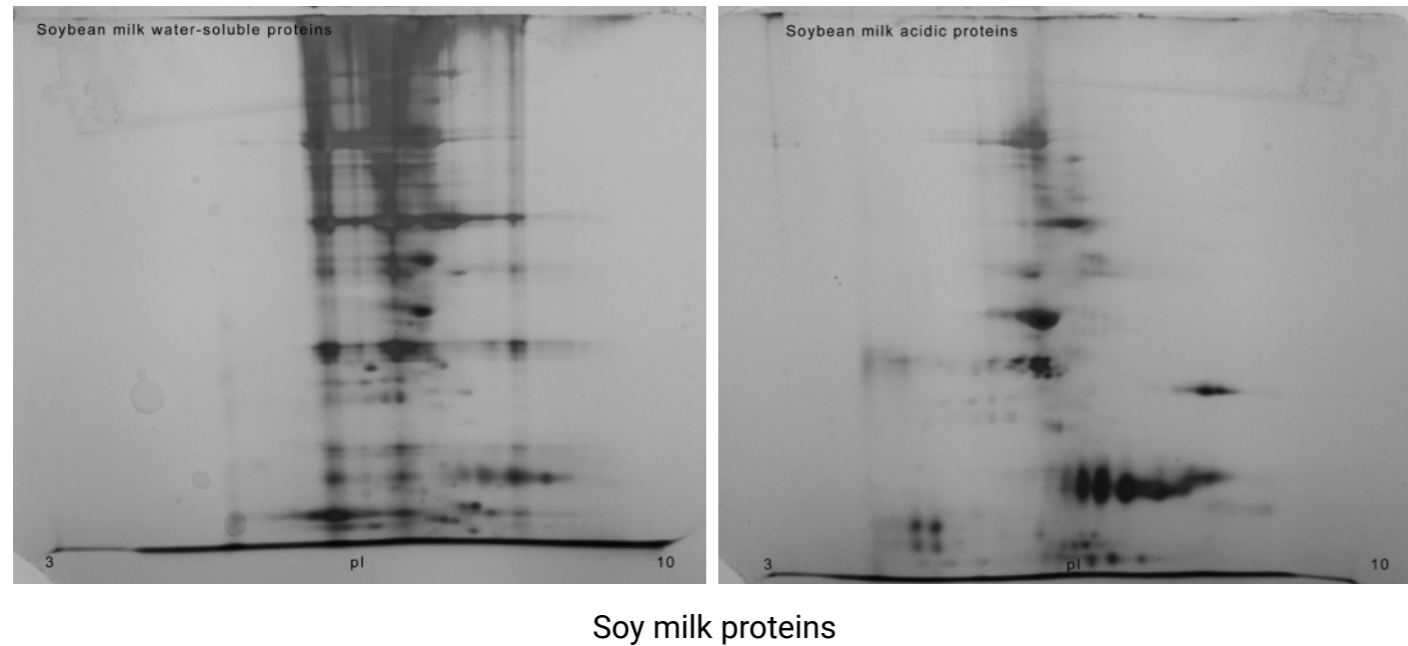


Soybean seed proteins



Soybean sprout proteins

### 3. Results & Discussion



The weakest representation of the different protein classes was visible in soybean sprouts.

Soybean sprouts show a lower presence of glycinin and  $\beta$ -conglycinin, followed by tofu and minced meat.

Glycinin and  $\beta$ -conglycinin are most common in seeds and milk.

### 4. Conclusions

The observed differences suggest similar future results in regards to the allergenic and immunogenic potential, which is extremely important for a possible, properly conducted and consistent with the health status diet.

### 5. Acknowledgements

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