Study Programme: PhD in Biology

Degree level: Doctoral degree

Course Title: Intraspecies Variability of Plants

Professor: Pal Boza, Ružica Igić

Required/Elective Course: Elective Course

Number of ECTS: 15

Prerequisites: passed exam "Special Systematics of Vascular Plants"

Course Objective: Higher level in the taxonomy of plants. Realizing the importance of intraspecies variability of plants. Mastering the skills of clear and valid selection of characters for determination of intraspecies taxa. Knowledge of techniques used in the detection of intraspecies variability.

Course Outcome: Application of acquired knowledge in scientific research, actively reviewing the literature and new results in the field of intraspecies plants taxonomy, self-creation of the working hypothesis and implementation of the research process in the taxonomy, development of taxonomic thought and proper interpretation of results.

Course Content:

Theoretical part

Intraspecies systematic categories by the International Code of Botanical Nomenclature and principles of determining intraspecies categories. The concept and definition of intraspecies categories. Forms of variability of plants such as: monomorphic, polymorphic and politypic species. The importance of mutations and modifications in the plant variability, their manifestations in the habit, and possibility of survival of individuals with certain changes of habitat. Factors that cause some changes in accordance with the tendency of evolutionary changes in selected species. Problematic taxa. On the basis of concrete examples, ecomorphological infraspecies adaptations of plants will be resaeach by certain types of habitats: steppe, salt marsh, sand, forests (allochthonous and autochthonous). Parallel taxa by principles of subordination. Examples of infraspecies variability.

Practical part

It is based on fresh plant material, which collects student. On the exercise will be analyzed selected species with a marked variability based on already described intraspecies taxa. It will be determined the characters that differ from the typical character of species (taxon), and try to connect with some of the ecological factors that cause these changes. They highlight features that are not mentioned in the literature and are clearly visible and may have taxonomic significance. Results of exercise will be displayed as a seminar paper.

Reading List:

Recommended doctoral dissertations and master's theses in the field of taxonomic methods by the mentor. Scientific papers and web pages with current problems in taxonomy of plants.

Total hours:		10			
Lectures: 5	Practicals:	Other:	Student research work:		

Methods of instruction:

Lectures, individual consultations, laboratory work, seminar papers.

Assessment (maximum number of points 100)

Requirements

Oral exam, defended seminar paper, written examination. The project - established in concept exploration and definition of taxonomic problems, proposed method of settlement.

Remark: