reliable references of flora. The qualitative parameters (frequency, and relative frequency, cover and relative cover) importance value and index of importance have measured. Life forms of each plant of region recognized by using of Raunkiaer method qualitatively and then regional biological spectrum have determined. According to this study in the mouteh wild life region %39 dominant plant species recognized that belong to 14 families and 29 genera. *Chenopodiaceae* %22(9 species), *Asteraceae* %14 (6 species) and *Poaceae* %10 (species) have the most species richness in the region. Chameophyte plants %42 and hemicryptophyte %39 were the most abundant life forms of region. Besides phanerophyte %12, geophytes %5, terophyte %2 were the other life forms of region. %94 regional species belong to the Irano-Torani elements and *Artemisia sieberi* and *Artemisia aucheri* in the plant combination of region have the most importance.

546 Study seed morphology of the genus Cistanche Hoffmg. et Link (Orobanchaceae) in Iran

Robabeh Shahi Shavvon[1] ,Shahryar Saeidi Mehrvarz[1] 1-*Department of Biology, Faculty of Science, University of Guilan, Rasht*

Cistanche (Orobanchaceae) contains perennial and holoparasite plants, with about 18 species are distributed in the arid and semi-arid regions of the world. This genus has 6 species in Iran, which among them *C. laxiflora* is an Iranian area endemic. Because similarity of species based on morphological characters, it seems that seed morphology is importance for separation sections and species of the genus. The seeds of species were examined using light and scanning electron microscopes. Seeds of *Cistanche* are extremely small, being almost 1 mm in size, with a wide variety of shapes (ovate, oblong or globose). Seed coat is constantly in all species is alveolate; with polygonal cells. *Cistanche* seeds usually have a smooth membranous outer periclinal wall; this wall collapse on the inner periclinal wall. Anticlinal walls of *Cistanche* seeds have different sculpturing which are important for delimitating of species. Observation made using SEM indicated that there are two sculpturing: Type I: Perforate: this type observed only in one species. Type II: Striate: this type was dominant shape among species. There is variation in the type II in different species, which based on it divided into 4 subtypes. The seed morphology results obtained from this assay was in agreement with the morphological data and confirms presence of two sections in this genus.

547 Investigation of Hyrcanian Relic Elements of Mountainus Ecosystem of Darkesh area in Northern Khorassan province,Iran

Aydani.M[1],Ghahremaninejad.F[2], Joharchi.M.R[3] *1.Member Young Researchers Club, Islamic Azad University of Gorgan-branch,Iran 2.University of Tarbiat moalem,Tehran,Iran 3.University of Ferdowsi, Mashhad, Iran*

Darkesh area is situated in northern Khorassan province, Iran, W. of Boujnurd, N.W. Aladagh Mt.. The area covers 4000 hectares and disseminated on 1000 to 2455 meters height from sea level. The average annual rainfall is about 502mm. Climatic type is huimid and cold region. This research provided investigation of Hyrcanian element and comparative of result with Golestan National Park. Therefore, we studied 506 species belong to 310 genera and 76 families and relic elements of the Hyrcanian flora in this area such as *Saponaria bodeana, Quercus castaneifolia, Colutea buhse*i. Result showed that this region is interesting, for hight potential of climatic, ecology and geographical condition.

548 Morphological and Taxonomical Study of the Genus *Festuca* L. (Poaceae) in Iran

Bagheri Shabestari E.S.2, Sheidai M. [1]and Assadi M. [2] *1-Faculty of Biological Science, Shahid Beheshti University, Tehran, Iran. 2-Research Institute of Forest and Rengeland, Department of Botany, Tehran,Iran.*

The genus *Festuca* is one of the largest genera whitin the Poaceae family, comprising about 450-500 species distributed in the temperate areas all over the world. Because of their well adaptation to the different environmental conditions and pasturage value, many botanists have frequently studied these plants.This genus has 11 species in Iran. In this research we have studied systematic and numerical taxonomy of Iranian species for the first time, based on 77 quantitative and qualitative characters from 46 populations were collected from their natural habitats. Cladistic analysis based on parsimony and clustering (WARD,UPGMA) as well as ordination based on Principal Coordinate Analysis (PCO) showed the species interrelationships.These results were shown Iranian species in four subgenus: *Festuca*, *Schedonorus*, *Drymanthele* and *Drymonaetes*.The most variable morphological characters among *Festuca* species were identified and used to complete species.It seems that the present study partly supports Bor and also presence of *F. akhanii* and *F. elwendiana* according to Akhani and Smith, so we suggested that