HISTORY OF THE DEVELOPMENT OF NATURAL SCIENCE IN UZBEKISTAN

Oripov Shoxrux Ilxom o‘g‘li
Qarshi davlat universiteti, Fiziologiya kafedrasi o‘qituvchisi
E-mail: oripov.shoxrux@bk.ru

ABSTRACT

This article discusses scientists who have contributed to the formation of concepts related to natural sciences, ecology, in particular, biodiversity, and the importance of their works, which are still a guide for natural sciences. It also touches on the diversity of our country's climate, the stages of the formation of concepts of biodiversity, the role of Uzbek scientists, in particular, scientists of the Academy of Sciences of Uzbekistan, and the importance of preserving the beauties of nature, instilling in young people a love for nature and educating people who preserve and protect natural resources.

Keywords: plants, animals, biodiversity, natural sciences, algae

Introduction

Natural sciences (physics, chemistry, biology, astronomy, geology, etc.) have a deep historical root in Central Asia.Uzbekistan, as part of the ancient civilizations (especially during the periods of Khorezm, Bukhara, Samarkand), played a key role in the development of natural science.Scholars from Uzbekistan made significant contributions during different eras: Ancient, Medieval Islamic Golden Age, Tsarist Russian period, Soviet era, and Independence. The development of natural science in Central Asia, including Uzbekistan, has been continuously ongoing, and even now this country occupies high positions among the countries of the world in the relevant areas of natural science (solar energy, plant chemistry, nuclear physics). The contributions of our great thinkers to the development of natural sciences are incomparable, and it is not enough to describe their merits in just one word.

The contribution of the mathematician, the first president of the Academy of Sciences of Uzbekistan, the author of the first textbook on higher and elementary mathematics, that is, the first textbook in the Uzbek language, Qori Niyazi, to the solution of the urgent problems facing natural sciences in recent years is incomparable.

Scientist K.Z.Zokirov, Doctor of Biological Sciences, Academician of the Academy of Sciences of the Republic of Uzbekistan, is a scientist who conducted research on the ecological environment, flora, flora and fauna of Central Asia, and divided this region into 4 zones: desert, steppe, mountain and pasture (Figure 1). These altitudinal zones differ from each other in height above sea level, climate, humidity, composition and structure of the soil, flora and fauna.

Figure 1. Views of different regions.

Unlike many botanists, we can clearly see the nationality in the research of K.Z.Zokirov, the scientist made a great contribution to the systematics of the flora of Uzbekistan in natural sciences, as well as the constant use of Uzbek terms in his two-volume capital works entitled "Flora of the Zarafshan Valley and the World of Plants".

Zohidov Tesha Zohidovich Academician of the Academy of Sciences of Uzbekistan, zoologist, ecologist. Many scientific works, books and monographs of the scientist played an important role in the creation and development of the foundations of ecological science in Central Asia. Zohidov served as president of the Academy of Sciences of Uzbekistan, and the basis of his scientific works was the study of vertebrates of Uzbekistan, the fauna of Karakum and Kyzylkum. Through many years of research work, the deserts of our region were divided according to zoogeographic zoning, the adaptation of the fauna of the Karakum and Kyzylkum became the basis for the creation of zoogeographic nomenclature. In addition, many birds, mammals, reptiles, and aquatic and terrestrial animals are perfectly described in the works of the scientist. Muzaffarov Akhror Muzaffarovich is an academician of the Academy of Sciences of the Republic of Uzbekistan, an algologist, a hydrobiologist, the author of more than 200

scientific works. He worked on the flora and ecology of algae in Uzbekistan, created the laws of algae distribution. He was one of the first to propose the use of algae as fodder for farm animals and determined the productivity of algae, in addition, he paid attention to the development and practical implementation of measures to combat weeds widespread in rice fields. In conclusion, the contributions of many such scientists and fuzalos to the natural sciences are incomparable, and even today, scientists are conducting scientific research for the development of science. In order to reduce the number of species of biodiversity and the impact of humans on nature, it is recommended to use various plants and algae as fodder. Thus, the development of science has continued from historical times to the present.

Conclusion

Uzbekistan has a rich legacy in the natural sciences, starting from ancient times and growing through centuries. The nation's scientific tradition continues today with innovations and global scientific collaboration. Preservation of ancient knowledge along with adoption of modern technologies marks Uzbekistan's unique contribution to world science.

References

1. Azimova D.O., Yodgorova D.Sh., Egamberdiyeva L.Sh., Jabborov B.T. Biodiversity and its protection. Tashkent: 2019.
2. Ergashev A., Yulchiyva M., Akhmedov O’., Abzalov A. Ecology. Tashkent: 2018. 282b
3. Yormatova D.Y., Khushvaqtova X.S. Ecology and nature protection. Stone: 2018. 200b