



**ACADEMICIA**  
**An International  
Multidisciplinary  
Research Journal**  
**(Double Blind Refereed & Peer Reviewed Journal)**



**DOI: 10.5958/2249-7137.2021.01224.6**

**SOME ISSUES OF IMPROVING THE HYDRO GEOLOGICAL  
CONDITIONS OF THE SOILS OF KARAKALPAKSTAN**

**Abduvahob Ismonov\*; Gulnoza Kattayeva\*\*; Bakhtiyor Ramazonov\*\*\***

\*Ph.D of Biological sciences,  
Head of the Department of Genesis,  
Art. scientific. Employee Geographyand soil Mapping Scientific,  
Research InstituteSoil Science and Agrochemistry,  
UZBEKISTAN  
Email id: abduvahob60@mail.ru,

\*\*Ph.D. Student,  
Scientific Research Institute of Soil Science and Agrochemistry,  
UZBEKISTAN  
Email id: gulnozakattayeva@mail.ru,

\*\*\*Associate professor, Ph.D.,  
Chirchik State Pedagogical Institute of Tashkent Region,  
UZBEKISTAN  
Email id: ramazonov\_74@mail.ru,

---

### **ABSTRACT**

*The article deals with lithological, geomorphological and hydrogeological conditions of the soils of the Republic of Karakalpakstan. According to the topography of groundwater, the causes of changes in their location and the laws of formation are studied. In protected areas located in irrigated areas, groundwater averages 1-2.5 m. around, their highest stay corresponds to the period of saline washing and vegetative irrigation. In Chimbay, Bozatov, Kungrad, Takhtakor, Shumanay and Karaozak districts, the average groundwater level is 2.5 m. stands at. In the former coastal areas of the dried bottom of the Aral Sea, the average groundwater level was 1.5-2.0 m.*

**KEYWORDS:** Delta-Alluvial Plains, Groundwater, Hydrogeological Conditions, Chemistry And Type Of Salinity, Relief

**REFERENCES**

1. PochviUzbekskoySSR III-tom[Soils of the Uzbek SSR III-volume]. izd. «Uzbekistan», Tashkent.1964. -s
2. KrilovM.M. Kvoprosugidrogeologo-meliorativnogorayonirovanienizoviyAmudari[On the issue of hydrogeological-reclamation zoning of the lower reaches of the Amu Darya], InstitutGeologiiANUzbekistana, Tashkent, 1952.
3. PochvirespublikiKarakalpakstan[Soils of the Republic of Karakalpakstan], Kn. 1-7. Tashkent 1995-1998.
4. KuzievR.K., AbduraxmanovN.Yu. idr. 2013. Ukarazaniyapovedeniyuzemelnogokadastra, provedeniyyupochvenno-iziskatelskixrabotisostavleniyupochvennixkart[Instructions for maintaining a land cadastre, conducting soil exploration and compiling soil maps]. Tashkent, - s. 52
5. Arinushkina Ye.V.1975. Rukovodstvopoximicheskомуanalizupochv [Soil Chemical Analysis Guide]. Moskva. MGU, - s. 491.
6. **RozanovB.G. 2004. Morfologiyapochv[Soil Chemical Analysis Guide]. Moskva,** Akademicheskiyproekt, - s. 432.
7. Ramazonov B.R., Kuziev R.K. Evolution of soils of the Aral Sea area under the influence of anthropogenic desertification. European science review. No. 1-2. 2018 February.Premier publishing Vienna 2018 pp 24-28.
8. Ramazonov B.R., Kuziev R.K. Soils of the dried part of the Aral sea and problems of desertification International Journal of Psychosocial Rehabilitation, Vol.24, Issue 04 2020. A web based peer reviewed publication for mental health practitioners, consumers & applied researchers. www.psychosocial.com Hampstead Psychological Associates Road, London NW1 7 JA United Kingdom. Page 4134-4146.
9. Ramazonov B.R. Ismonov A.J. Natural conditions of soil formation and increasing productivity of the Aral Sea soils (on the example of the Kungrad region) Fundamental and applied research: from theory to practice: materials of the II international scientific and practical conference, timed / T.4. - Voronezh, 2018. - P. 235-240.
10. Koll. avtorov. 1975. PochviUzbekistana[Soils of Uzbekistan]. Tashkent. – c. 5-105