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Title: **IMPROVED HOLE DRAINAGE FORMING DEVICE STRUCTURE AND WORKING EFFICIENCY**

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IMPROVED HOLE DRAINAGE FORMING DEVICE STRUCTURE AND WORKING EFFICIENCY

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Abstract: Today in the city of Kurgan-Tube there are none of the large industrial premises, such as plumber honored assistant to the military commander

Keywords: Drain, hole drain, tapered surface tapered tip cylinder, marker, base wheel, contour, coverage width.

Introduction

On the creation of technical means that soften the subsoil and subsoil layer of irrigated lands in the Republic and serve to improve the meliorative condition of the soil

G.M.Rudakov, R.I.Boymetov, M.Muradov, F.M.Mamatov, A.To'khtagoziev, I.T.Ergashev, N.M.Muradov, N.S.Bibutov, O.RGenceaev, H.RGaffarov, T.S.Khudoyberdiev, B.V.Welcome, R.A.Abdurahmonov, M.A.Akhmedjanov, G.N.Y.Kim, F. O'. Zhurraevs were engaged in improving the land reclamation situation, the causes of soil salinity and a complex of measures against them.

As a result of this research work, the techniques and techniques used to improve the melioration condition of the soil, mitigate the subsurface layer, create open and closed drainage are being used in agriculture and certain positive results have been achieved. However, although these studies have sufficiently studied the issues of the development of technologies and technical means for the formation of hole drainage on saline and sizot waters in nearby lands in order to improve the meliorative state of the lands, there is a decrease in efficiency, improvement of the meliorative state of the lands by consuming a lot of energy, that is, It was from the account of them that he conducted research on the new device and introduced an improved hole drainage opener device.

Improved hole drainage forming device structure and application technology



It is known to us that in a device that creates a perforated drainage (one working column, the drawback is that the working flour is low, at a certain depth a perforated drainage is formed, the formed hole is cut off the top of the drainage, which is explained by the rapid kissing, work efficiency.

The device that creates a hole drain creates a hole drain at a depth of 60 cm. To reduce the pulling force of the device, to ensure that the working body moves steadily in the Ram, to reduce the metal capacity, to ensure the quality of work, to ensure long-term effective operation of the hole drain in the process of salt washing, an option developed based on the dimensions is being developed, the working and technological drawings are drawn,



The new recommendation is to ensure reliable operation of the device, long-term operation of the hole drainage without overgrowth, reduce energy consumption, increase work productivity and achieve quality performance in improving the land reclamation situation.

The purpose of the proposed utility model is to ensure the reliable operation of the device that creates a hole drain, reducing energy consumption, improving working productivity and efficiency.

The issue is solved by the fact that in the formation of a hole drain, the proposed utility model is carried out by a device consisting of a conical three-cylinder (6) with a complex shape, base wheels (5), hanging rama(1), markyor (2), working columns (3). In the process of moving the device, a cone-tip cylinder with a geometrical surface, having a complex shape, compresses the soil to the side atorf (3600) from the account of the circular motion, forming a smooth-bore drainage. Working columns are at processing depths up to 80 cm, the processing range of working bodies (flexible) is 1-2 m.

From the account of the application of this device before the autumn salt washing, it is possible to easily pass through the hole drains of harmful salts contained in the soil, thereby creating an opportunity to drain into drainage pipes, open collector trenches. But it should be taken into account that the mechanical composition is well formed around the heavy terrain, where interim beehives are formed, and through them the collector is discharged into the trenches.

It is also proposed to find a solution to the problem posed and improve it, a new, conical three-cylinder with a complex shape ensures long-term (2-3 years) effective operation

without kissing the hole drainage from the account of condensation of the soil around the sides.

Literature:

1. Sh.M.Mirziyoev. The consent of our people is the highest assessment given to our activities. 2-book" glorifying the labor of agricultural workers who are the founders of our sustenance – fasting, raising the development of the sphere to a new level-our main task", Tashkent – "Uzbekistan" -2018 years. 41-70 b.
2. Decree of the president of the Republic of Uzbekistan "on the strategy of actions for the further development of the Republic of Uzbekistan" № PF-4947 on February 7, 2017.
3. Selskoxozyaystvennaya technique / spravochnik// - M., 1963. 418-424 b.
4. Broshchov T.S., Mansurov R.A. Organization and technology of melioration works// - Tashkent. 1986, 65-174 b.
5. Pazova T.H. Technologii i sredstvaasasii dlya Protivo-erozionnoy obrabotki sklonnix pochv Kardino-Balkarskoy Respubliki. - Moscow, 2009. Authoref.thesis. neither soiskanie uchenoy stepeni doktora texnicheskix nauk. 11-25 b.
6. Vafayev.T. Melioration machines/ / - Tashkent, 2013. 24-252 b.
7. 54. <https://yunc.org> you know what?
8. Vafayev S.T. Wash drainage pipes-cleaning technology. Materials of the international scientific and technical conference "modern problems of melioration and development of water resources of the Republic of Uzbekistan" // - Tashkent, 2008, 271-273 b.
9. Dop. preyskurant №21-03-1981 / 179, №39, preyskurant izdat. 1987.
10. Normativno-spravochniy material dlya ekonomicheskoy otsenki selskoxozyaystvennoy technical. M., SNII Tei, 1984, 5-10,38-145, 174-175, 205-206 the b.
11. Zhuraev F.A'. Theoretical and technological basis of construction of drainage-hole in the soil layer //Agroilm.- Tashkent. 2016.-№ 2(40). 53-55 b.
12. Juraev F.He Primenenie drenajnogrotovogo ustraystva na zasalennix zemlyax // Agrarnaya Nauga. -Moscow, 2016.-№5. 30-31 b.

13. Zhuraev F.A', Sharopov R.N.Y. Umu-Mi differential equations of one-dimensional flow in the process of drainage-hole construction non-linear groundwater sizish // Agroilm.- Tashkent, 2016.-№ 4(42). 68-69 b.
14. Juraev F.He, Akhmedjanov D.G. Sposob povisheniya stoykosti Pochvi v krotovom drenaje // Uzbekistan agriculture.- Tashkent, 2016. -№9. 53b.
15. Xamidov M.H., Coraev F.He Ustroystvo I printsiipi Raboti drenajno-krotovogo orudiya // Irrigation and Mellioration. - Tashkent, 2017. №1(7). 9-12 b.
16. Muradov N.M., Zhuraev F.A', A.N.Y.Murtozoev. Drainage-hole-forming device in the subsoil of saline lands and the effectiveness of its application //Uzbekistan mining notification. - Navoi, 2017.№ 2,129-131 b.
17. Xamidov M.H., Zhuraev F.A'. Improved land reclamation //Irrigation and Mellioration with the help of linear softeners and drainage-hole forming devices. - Tashkent, 2017. №4(10). 40-43 b.
18. Patent Ruz № UZ FAP 00727. Drenajno-krotovoe orodie/Muradov N.M., Coraev F.He // Official newsletter. -2012. -№5.
19. Patent Ruz № TR FAP 00832. Drainage-hole opener machine hanging device / Juraev F.A'. // Official newsletter. -2013. -№7.
20. Patent Ruz № UZ FAP 01070. Rixlitel / Coraev F.He, Rashidov S.R// Official newsletter. -2014. -№ 6.
21. Patent Ruz. NUMBER FACE FAP 01216. Drenajno - krotovoe orodie / Akhmedjanov D.G., Coraev F.He // Official newsletter. - 2017.-№ 4.
22. Zhuraev F.A'. Creation of resurstejamkor technologies and techniques for the optimal melioration of saline soils. the t.the f.D. written dissertation for academic degree. Tashkent 2019 y. 3-320 b.