

Development of Safety Technique Rules When Using Plant-Tractor Units

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ABSTRACT

This article provides guidance on occupational health and safety required for mechanized field work, including the use of planters. Following these safety precautions will help prevent potential accidents.

Safety engineering is a technical discipline that determines the causes of accidents that may occur in places where machines work and determines ways to prevent and eliminate accidents based on the study of production tools and work methods. Accident prevention measures include:

- a) technical activities: improvement of machines, equipment, devices and tools; design and study of fencing etc.;
- b) organizational activities: creation of effective technological and production processes, training in safe working methods, control of the implementation of safety equipment rules;

Safety techniques are inextricably linked with fire fighting measures. If these measures are followed, the risk of fire will disappear, and in the event of a fire, it will be necessary to organize measures to save people, animals, equipment, machines, crops, etc., as well as property. Every year, many events are held throughout the country to improve and improve security techniques and anti-robbery measures. Every employee must know and follow the rules of safety techniques in order to prevent injuries and occupational diseases. Accidental injury to a worker while performing a production task is called a production injury. In this case, the worker may temporarily or permanently lose his ability to work. Unfortunate events are the lack of training and guidance of the worker at the workplace, the extension of the working day it may happen due to reasons such as being sent, being processed on faulty machines.

The energy availability of today's rural economy is higher than ever and growing steadily. Supplying agriculture with modern techniques is constantly increasing.

In addition to quantitative changes in agricultural machinery, important qualitative changes are also

taking place: high-speed high-power tractors, extensive hydroficated aggregates, machines for initial and pre-planting tillage, modern combines for harvesting technical crops, automation, control tools and others are in current kilinmok. With this, in addition to achieving high productivity and productivity in agriculture, it is necessary to organize labor protection and safety equipment at a high level in highly mechanized agricultural production.

Planting of agricultural crops with the help of machine-tractor units is allowed only on machine-tractor units that have no technical defects in planting. Each machine-tractor unit must have front and rear lights for night operation. The machine-tractor unit must have a rear view mirror. The mechanic uses this window to monitor the machine and the people working on the unit behind it. During work, the mechanic should have a set of tools, a first aid kit, a guide, a rag for wiping hands, a bottle of water and a fire extinguisher. The mechanic must have gloves and protective glasses.

At the beginning of each shift, the mechanic carefully checks the condition of the unit, the tightness of the connections, and the correct installation of the plugs must Particular attention is paid to the condition of the steering, clutch, brakes, towing device, lighting and fuel system devices.

It is forbidden to work on a machine-tractor assembly that is poorly adjusted or has technical defects, as well as leaking fuel, water, or oil. When refueling machine-tractor units, it is necessary to pay special attention to fire prevention measures. When entering the fuel tank, the exhaust pipe should face the fuel tank; the fuel tank must be pumped through a copper mesh funnel; it is necessary to unscrew the cork of the bottles with a special key. An electric lamp or an electric lantern should be used when driving the machine-tractor units at night.

When checking the water in the radiator of an overheated engine, be careful of steam and boiling water. To do this, the tractor operator should wear gloves and stand an arm's length away from the wind.

On cold days, it is necessary to heat lubricants in special containers. When checking fuel containers, it is forbidden to light matches, light fires and smoke. If the fuel catches fire, it should be extinguished with sand, earth, felt or a fire extinguisher. In such cases, the use of water is prohibited.

When operating planter-tractor units, the planter observer must be specially trained, instructed and at least 18 years of age. The observer must be provided with special clothing and personal protective equipment.

It is necessary that people do not stand around the planter-tractor aggregates while moving them, and all workers are warned by a special signal.

When connecting the tractor to the planter, it is necessary to use the engine at the lowest speed. The operator must stop the tractor at the first signal of the driver, so his foot must always be on the clutch pedal when reversing. It is forbidden to drive the tractor back with the trailer, jump from the unit in motion, sit on the benches, stand on the ladder, adjust the unit, make repairs, transfer from the tractor to the trailer or vice versa.

When going uphill and downhill, it is driven in I or II gear. When crossing the railway, especially in unprotected areas, the driver must stop the tractor, determine whether the train is coming or not, and then go to the first speed. Defects detected during operation are eliminated after stopping the engine.

Special care is required from the mechanic working at night. First of all, he needs to be familiar with the area where he works at night. Therefore, he should go around the place where he works at night during the daylight hours.

Do not stand in front of or behind the belt drive pulley during operation, and do not insert or remove the belt from the rotating pulley. All transmissions must be carefully protected with a case.

The working bodies of planting machines are driven by the power take-off shaft of the tractor. Therefore, the cardan transmission must be equipped with a special device to ensure safety. Trailers must be firmly connected so that they do not hit the tractor. It is forbidden for people to get into

mounted (suspended) vehicles. It is forbidden to leave the installation machines elevated after work and during long-term shutdowns.

When entering the gas station, the machine-tractor units must have the necessary fire extinguishing equipment.

In addition, it is necessary to observe the following safety rules when working with planting machine-tractor units:

1. Only persons who are familiar with the rules of loading and operating the planter-tractor unit, who can eliminate their shortcomings and who have a special certificate giving the right to operate these units, are allowed to work on the planter-tractor unit. It is strictly forbidden to hand over machine-tractor units for use to outsiders.
2. Machine-tractor units with technical defects should not be used.
3. It is necessary to give a sound signal before driving the machine-tractor units.
4. Only when the machine-tractor units are moving straight, the mounting plugs can be moved to the running or working position.
5. Lubrication of machine-tractor units, tightening of bolts and nuts, or cleaning of contaminated working surfaces are performed only after stopping the machine-tractor unit. It is forbidden to carry out repairs or adjustments under the plug attached to the tractor.
6. When the seeding machine-tractor units are in the running position, the unit should be turned smoothly. If the chain of the installation system is loose, it is not allowed to turn the units.
7. Cultivator or a pad should be placed under them during maintenance of planting MTA.
8. Planting When the MTA is stopped, the planter must be lowered to the ground.

If the above safety rules are followed, accidents will be avoided when using planting MTA.

References:

1. Бахриддинов, Н. С., Мамадалиев, Ш. М., & Ёкубжанова, Ё. (2022). ПРАКТИЧЕСКОЕ ЗНАЧЕНИЕ ОРГАНИЗАЦИИ ЭКОЛОГИЧЕСКОГО ОБРАЗОВАНИЯ В ДОШКОЛЬНОМ УЧРЕЖДЕНИИ. *Oriental renaissance: Innovative, educational, natural and social sciences*, 2(5), 443-448.
2. Мамадалиев, Ш. М. (2017). Профессиональное воспитание как категория производственного обучения. *Достижения науки и образования*, (2 (15)), 43-45.
3. Мамадалиев, Ш. М. (2018). Формирование культуры безопасности жизнедеятельности студентов в процессе профессиональной подготовки в вузе. *Вопросы науки и образования*, (17 (29)), 65-67.
4. Мамадалиев, Ш. М., & Рахманов, Ш. В. (2019). Совершенствование системы обучения безопасности жизнедеятельности. *Вопросы науки и образования*, (17 (64)), 81-84.
5. Vaxriddinov, N., Mamadaliev, S., & Djuraeva, D. (2022). ОЛИЙ ТАЪЛИМ МУАССАСАЛАРИДА ЭКОЛОГИЯДАН ЎҚУВ МАШҒУЛОТЛАРИНИ ТАШКИЛ ЭТИШ. *Science and innovation*, 1(B8), 10-15.
6. Mashrabboyevich, M. S., & Gulomjonovna, Y. Y. (2022). Teaching Construction Ecology with New Pedagogical Technologies. *CENTRAL ASIAN JOURNAL OF THEORETICAL & APPLIED SCIENCES*, 3(5), 210-212.

7. Мамадалиев, Ш. М., & Уринова, Д. Т. (2018). Инновационные подходы в организации урока" основ безопасности жизнедеятельности". *Достижения науки и образования*, (6 (28)), 93-95.
8. MAMADALIYEV, S. LIVING SAFETY TRAINING IN THE FAMILY. *ЭКОНОМИКА*, 98-100.
9. Mashrabboevich, M. S. (2022). XAYOT FAOLIYATI VA XAVFSIZLIGI FANINING MA'RUZA MASHG 'ULOTLARINI PEDAGOGIK TEXNOLOGIYALAR ASOSIDA O 'QITISHNING MAQSADI.
10. Бахриддинов, Н. С., Мамадалиев, Ш. М., & Джураева, Д. У. (2022). Современный Метод Защиты Озонового Слоя. *CENTRAL ASIAN JOURNAL OF MEDICAL AND NATURAL SCIENCES*, 3(3), 1-4.
11. Тураев, З., Шамшидинов, И. Т., Усманов, И. И., & Мамадалиев, Ш. М. (2020). Исследование взаимодействия сульфатов меди, цинка и кобальта с монокальцийфосфатом при 30 и 80° с. *Universum: химия и биология*, (1 (67)), 21-25.
12. Qirgizov, X., Mamadaliyev, S. M., & Yigitaliyev, J. (2021). INDICATORS SCIENTIFIK AND PRACTICAL RESEARCH OF WATER-SPRINKLER. *Экономика и социум*, (5-1), 398-400.
13. Мамадалиев, Ш. М. (2022, December). XA'ET FAOLIYATI XAVFSIZLIGI FANINI 'QITISHDA INTERFAOL METODLARDAN FOYDALANISHNING A'AMIYATI. In *Proceedings of International Educators Conference* (Vol. 3, pp. 155-165).
14. Mashrabboevich, M. S. (2022, December). USE OF NEW PEDAGOGICAL TECHNOLOGIES IN TEACHING SUBJECTS OF LIFE ACTIVITY SAFETY. In *Proceedings of International Educators Conference* (Vol. 1, No. 3, pp. 483-493).
15. Мелибаев М, Мамадалиев Ш. Трактор агрегатининг ўрнидан раво кўзғалиши *ФарПИ илмий-техник журнали*.–Фарғона, 2017й, №1 , 34-36.
16. А.Алиязаров, Мамадалиев Ш. Теоретические предпосылки и технологические возможности разработки ресурсосберегающей телотехнологии получение золоцементных систем. *ФарПИ илмий-техник журнали*.–Фарғона, 2012й, №4
17. Х. Қирғизов, Ш.Мамадалиев. Ёмғирлатиб суғориш машинасининг амалий ўрганилган кўрсаткичлари. *ФарПИ илмий-техник журнали*.–Фарғона, 2012й, №3
18. Mamadaliyev, A. T., & Umarov, I. (2022). Texnikaning rivojlanish tarixi. *PEDAGOGS jurnali*, 2(1), 232-235.
19. Mamadaliyev, A. T. (2022). The movement of the population when a flood happens. *Scientific Impulse*, 1(5).
20. Mamadaliyev, A. T. (2022). Naturally occurring carbonate minerals and their uses. *Scientific Impulse*, 1(5).
21. Tukhtamirzaevich, M. A., Karimov, I., & Sadridinovich, B. N. (2022). TEACHING THE SUBJECT OF ENGINEERING GEOLOGY ON THE BASIS OF NEW PEDAGOGICAL TECHNOLOGY. *Scientific Impulse*, 1(5), 1064-1072.
22. Н.Бахриддинов, Ш.Мамадалиев. Полиз экинлари учун суюқ фосфорли ўғит ишлаб чиқариш Босома “Озиқ-овқат маҳсулотлари хавфсизлиги, ресерс, энергия тежамкор ва инновацион технологиялар самарадорлиги” ХАЛҚАРО ИЛМИЙ-ТЕХНИК КОНФЕРЕНЦИЯ. Наманган 2019 йил 28-30 ноябрь

23. Х.Қирғизов, Ш.Мамадалиев. Тежамкор эгат тиркиш очкич. *ФарПИИ илмий-техник журналы.* – Фаргона, 2020й, №4
24. Х.Қирғизов., Ш.Мамадалиев. Сув тақчиллиги шароитида сувни тежаш ҳамда суғориш сифатини ошириш учун тавсиялар босма Тош ДТУ хабарлари. 2004й.
25. С.Темиров, К.Набиев, Ш.Мамадалиев. Машина деталлари ишчи юзаларининг чидамлилигини ноанъанавий усул ёрдамида ошириш. *ФарПИИ илмий-техник журналы.* – Фаргона, 2006й, №2.
26. Мамадалиев, А. Т., & Мамаджанов, З. Н. Фавқулодда вазиятлар ва аҳоли муҳофазаси. *Дарслик. Тошкент.* 2.
27. Mamadaliyev, A. T., & Bakhriddinov, N. S. (2022). Teaching the subject of engineering geology on the basis of new pedagogical technology. *Scientific Impulse*, 1(5).
28. Tukhtamirzaevich, M. A. (2023). Landslide occurrence in the territory of our republic and measures to prevent them. *pedagog*, 6(2), 372-381.
29. Tukhtamirzaevich, M. A. (2023). The flood phenomenon observed in the territories of our republic and the fight against this phenomenon. *pedagog*, 6(2), 333-342.
30. Tukhtamirzaevich, M. A. (2022). THE MOVEMENT OF THE POPULATION WHEN A FLOOD HAPPENS. *Scientific Impulse*, 1(5), 1859-1866.
31. Мелибаев М., Ш.Мамадалиев. Трактор агрегатининг ўрнидан равон кўзғалиши. *ФарПИИ илмий-техник журналы.* – Фаргона, 2017й, №1
32. Tukhtamirzaevich, M. A. (2022, December). DIMENSIONS AND JUSTIFICATION OF OPERATING MODES FOR PANING DEVICE OF HAIRD COTTON SEEDS WITH MACRO AND MICRO FERTILIZERS. In *International scientific-practical conference on "Modern education: problems and solutions"* (Vol. 1, No. 5).
33. Tukhtamirzaevich, M. A. (2022, December). RESULTS OF LABORATORY-FIELD TESTING OF HAIRY SEEDS COATED WITH MINERAL FERTILIZERS. In *Proceedings of International Educators Conference* (Vol. 1, No. 3, pp. 528-536).
34. РУз, П. IAP 03493. Способ покрытия поверхности семян сельскохозяйственных культур защитно-питательной оболочкой и устройства для его осуществления/К. Гафуров, А. Хожиев, АТ Росабоев, АТ Мамадалиев. *БИ–2007*, 11.
35. Мамадалиев, А. Т. (2022, December). ИНЖЕНЕРЛИК ГЕОЛОГИЯСИ ФАНИ МАВЗУСИНИ ЯНГИ ПЕДАГОГИК ТЕХНОЛОГИЯ АСОСИДА ЎҚИТИШ. In *Proceedings of International Educators Conference* (Vol. 1, No. 3, pp. 494-504).
36. Tukhtamirzaevich, M. A. (2022). NATURALLY OCCURRING CARBONATE MINERALS AND THEIR USES. *Scientific Impulse*, 1(5), 1851-1858.
37. Мамадалиев, А. Т. (2022). Карбонатли минераллар ва уларнинг халқ хўжалигидаги аҳамияти. *PRINCIPAL ISSUES OF SCIENTIFIC RESEARCH AND MODERN EDUCATION*, 1(10).
38. Tuxtamirzayevich, M. A. (2020). Study of pubescent seeds moving in a stream of water and mineral fertilizers. *International Journal on Integrated Education*, 3(12), 489-

39. Мамадалиев, А. Т. (2023, January). Ўзбекистон республикаси хуудларларида сел келиши ва унда аҳолининг ҳаракати. In *Proceedings of International Conference on Scientific Research in Natural and Social Sciences* (Vol. 2, No. 1, pp. 211-220).
40. Mamadaliev, A. T., & Turgunov, A. A. (2022). Causes of the occurrence of landslides and measures for its prevention. *Scientific Impulse*, 5, 100.
41. Mamadaliev AT, T. A. (2022). Suv toshqini sodir bolganda aholining harakati. *PRINCIPAL ISSUES OF SCIENTIFIC RESEARCH AND MODERN EDUCATION*, 1(10).
42. Tukhtamirzaevich, M. A. (2022). FLOODING IN THE TERRITORY OF THE REPUBLIC OF UZBEKISTAN AND THE MOVEMENT OF THE POPULATION THEREIN. *Scientific Impulse*, 1(5), 2285-2291.
43. Tuxtamirzaevich, M. A. (2021). Presowing Treatment of Pubescent Cotton Seeds with a Protective and Nutritious Shell, Consisting of Mineral Fertilizers in an Aqueous Solution and a Composition of Microelements. *Design Engineering*, 7046-7052.
44. Мамадалиев, А. Т. (2021). Теоретическое обоснование параметров чашеобразного дражирующего барабана. *Universum: технические науки*, (6-1 (87)), 75-78.
45. Гафуров, К., Росабоев, А., & Мамадалиев, А. (2007). Дражирование опущенных семян хлопчатника с минеральным удобрением. *ФарПИИ илмий-техник журнали.–Фаргона*, (3), 55-59
46. Mamadaliev, A. (2019). THEORETICAL SUBSTANTIATION OF PARAMETERS OF THE CUP-SHAPED COATING DRUMS. *Scienceweb academic papers collection*.
47. Росабоев, А. Т., & Мамадалиев, А. Т. (2013). старший преподаватель кафедры экологии и охраны труда Наманганского инженерно-педагогического института, г. Наманган, Республика Узбекистан. *Редакционная коллегия*, 174.
48. Гафуров, К., Шамшидинов, И. Т., Арисланов, А., & Мамадалиев, А. Т. (1998). Способ получения экстракционной фосфорной кислоты. *SU Patent*, 5213.
49. Ҳ.Қирғизов, Ш.Мамадалиев. Ясси кесувчи ва стрелкасимон панжалар орасидаги бўйлама масофани аниқлаш . Ўзбекистон аграр фани хабарномаси 2014 й №4., 89
50. Б.Атаханов, Ҳ. Қирғизов, Ш.Мамадалиев.Определение диаметра поперечного сечения синусоидально-логарифмического рабочего органа ротационной почвообрабатывающей. *ФарПИИ илмий-техник журнали.–Фаргона*, 2015й, №4.
51. А.Хамдамов, Ш.Мамадалиев. Енгил механик таркибли тупроқларнинг сув хоссаларини яхшилаш йўллари. *ФарПИИ илмий-техник журнали.–Фаргона*,2016й, №3
52. Tukhtamirzaevich, M. A. (2023). Interactive educational methods in teaching the subject of physicochemical properties of minerals. *Scientific Impulse*, 1(6), 1718-1725.
53. Mukhtoraliyeva, M. A., Mamadaliyev, A. T., Umarov, I. I., & Sharopov, B. X. Development of technology on the basis of scientific achievements.«. *Матрица научного познания*, 28, 4-12.
54. Мамадалиев, А. Т., & Мухитдинов, М. Б. Доцент Наманганский инженерно-строительный института Республика Узбекистан, г. Наманган. *НАУЧНЫЙ ЭЛЕКТРОННЫЙ ЖУРНАЛ «МАТРИЦА НАУЧНОГО ПОЗНАНИЯ*, 27.