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ЦЕНТР ДИСТАНЦИОННОГО ОБУЧЕНИЯ И ПОВЫШЕНИЯ
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Аннотация

Данные методические указания предназначены для студентов факультета «Машины и оборудование агропромышленного комплекса» специальности 190206 Сельскохозяйственные машины и оборудование. Цель пособия - подготовить студентов к чтению оригинальной технической литературы на английском языке.

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UNIT № 1

I. Переведите предложения, обращая внимание на способы перевода глагола с — ing окончанием.

1. In three days they have made good progress in hoeing out weed.
2. By thoroughly working the soil the farmers obtained a record crop.
3. It was their idea to break down the soil by using cultivators.
4. This cultivator is designed for tilling the soil on working depth up to 10 cm.
5. Lifting mechanism serves for lowering working tools into the soil and lifting them into transport position.

II. Прочитайте и переведите текст.

Effects and Uses of Cultivators.

1. Cultivation machines are used for breaking down the soil before or after a crop is down, for covering seeds, for consolidating the soil and for hoeing out weeds.
2. Cultivators break down the soil and tend to lift it. Unrotten trash is brought to the surface. They are often used in heavy land to avoid compaction and for preparing land for root crops when a deep tilth is required.
3. Cultivators can often be adapted for row crop hoeing. Special hoe blades are fitted which cut away the weeds and small concave discs can also be attached. The cultivator frame is drilled so that the position of the tines can be altered to suit the row width of the crop being hoed.
4. It is usual to set the attachments so that the discs run close to the rows in order to clear away the soil from the young plants and to prevent them from being buried by the following L hoes. The broad A hoes complete hoeing in the middle of the rows. When the plants are very large, the discs are not usually fitted.

III. Запомните лексический минимум.

Lhoe - односторонняя плоскорежущая лала;

A hoe - стрельчатая лапа.

To break down, to consolidate, to hoe out, to bury, to tend, to till,



to adapt, to attach, close to. in order to;

IV. Укажите номер абзаца, где

... упоминается о возможности перестановки рабочих органов культиватора в зависимости от ширины обрабатываемых рядов;

1. ... перечисляются назначения культиватора;
2. ... приводятся некоторые виды лап культиваторов.

V. Ответьте на вопросы по тексту.

What are cultivators designed for?

1. - What are the working tools of cultivators?
2. Are cultivators used in heavy lands?
3. Are cultivators used for a deep tills?
4. Can cultivators be adapted for row crop hoeing?

VI. Образуйте от данных глаголов существительные, которые встречаются в тексте. :

Totill, to cultivate, to compact, to attach.

VII. Прочитайте и переведите текст Cultivators. обращая внимание на следующие вопросы:

1. Как агрегируется культиватор с трактором?
2. Сколько существует способов контроля глубины обработки почвы культиватором?
3. Какие способы контроля глубины обработки почвы описываются?

CULTIVATORS.

These machines may be attached directly to the **tFactor** by 3-point linkage **or**

pulled from the tractor drawbar. Working depth may be controlled in three ways.

- a. Wheel control; depth limited wheels are linked by an adjustable mechanism to frame. This method maintains the machine at a very accurately controlled working depth, but no weight is transferred to the rear wheels of the tractor and thus adhesion is not as-



sisted. All trailed cultivators use this type of depth control.

b. Draught control; the force set up in the top link of the 3-point linkage is fed to the control valve in the hydraulic system; the working principles are exactly the same as those described when dealing with draught control for ploughing depth. Weight is transferred to the rear wheels of the tractor and thus wheel grip is improved, but the working depth tends to vary if the soil texture is not uniform.

c. Position control; in this system the working depth of the implement is limited by a mechanical stop on the tractor or by locking the oil in the hydraulic cylinder. When this method is used, a constant working depth is maintained as long as the field is level.

VIII. Составьте тан к тексту на английском языке [не менее 5 пунктов].

IX. Прочитайте текст CULTIVATOR MODEL КУТС-4.

2A, ответьте на вопрос, данный после текста.

The Universal Tractor Cultivator. Model КУТС-4. 2A is designed for cultivating interrows [loosening the soil and weed killing] of cereal row crops and technical crops such as sunflower, cotton, tobacco and other crops sown by tractor drills.

This cultivator can be used for overall tilling the soil on a depth up to 10 cm provided the field is free of stones or unploughed places with a slight development of weeds.

The КУТС-4. 2A cultivator is intended for cultivating interrows of row crops with row crop tractors, whereas it can operate with any medium and high-power tractors for overall soil tillage.

Вопрос: О чем идет речь в тексте: об устройстве или назначении культиватора КУТС-4. 2A?



UNIT № 2

I. Переведите предложения, обращая внимание на способы перевода сказуемых. The disk harrow comprises a number of gangs of concave discs.

1. The harrow discs can be set at a variable angle to the direction of travel.
2. Disc harrows are sometimes used for stubble cleaning. .
3. Disc harrows are available in various widths.
4. The disc harrow sections may range from 3 % to 5 ¹/₄ feet.
5. The rear gang may be set to run directly behind the front gang.
6. The harrow can also be adjusted to control the penetration of the rear gang.

II. Прочтите и переведите текст.

Trailing Disc Harrow.

Trailing disc harrows are hitched to the drawbar of the tractor and pulled by the tractor. There are different types of disc harrows. Here you will meet single-action, double-action and offset trailing disc harrows.

The single-action disc harrow consists of two gangs of discs placed end to end which throw the soil in opposite directions. The cutting width for single-action disc harrows may range from 4 to 24 feet. Sizes wider than 12 feet have end sections that fold over on the main harrow so the harrow can pass through gates.

The double-action disc harrow is often called a tandem harrow because a set of two gangs follows behind the front gangs and is arranged so that the discs on the front gangs throw the soil in one direction [usually outward], and the discs on the rear gangs throw the soil in the opposite direction. Generally, the trailing type disc harrow cannot be lifted off the ground for turns, but some harrows are equipped with transport wheels and a remote-control hydraulic lift. The sizes in width of cut range from 5 to 12 feet.

The offset disc harrow is given this name because the harrow can be operated in offset position in relation to the tractor. A change in the hitch can cause the harrow to run either to the right or left of the tractor.



III. Запомните лексический минимум.

to hitch, to pull, a single-action harrow, a double-action harrow, an offset harrow, a gang, to range, to fold, to throw, front, rear, remote control, to cause.

IV. Ответьте на вопросы к тексту.

1. How can the trailing disc harrow be attached to the tractor?
2. How many kinds of trailing disc harrows are mentioned in the text?
3. What kinds of trailing disc harrows are mentioned in the text?
4. What is the difference between the single-action and double-action disc harrows?
5. What is the cutting width for single-action disc harrows?
6. What is the cutting width for double-action disc harrows?
7. How can the offset disc harrow run in relation to the tractor?

V. Вставьте требуемые предлоги.

1. The gangs of discs are placed end ... end.
2. The discs throw the soil ... opposite direction.
3. The harrow can pass ... gates.
4. The rear disc gangs of the double-action disc harrow follow ... the front disc gangs.
5. Some trailing disc harrows are equipped ... transport wheel.

VI. Прочитайте текст Mounted Disc Harrows, обращая внимание на следующие вопросы.

1. Как агрегагируется навесная дисковая борона с трактором?
2. О скольких, видах дисковых борон говорится в тексте⁹
3. Какие дисковые бороны описываются в тексте?
4. Каково устройство боковой навесной дисковой бороны?



Mounted Disc Harrows.

This type of disc harrow is designed to be used with tractors equipped with three-point hitch and hydraulic lift systems.

- а) о конструкции сеялки;
- б) об уходе за сеялкой;
- с) о размерах зерновых сеялок.

Grain Drills.

The grain drill is used to place the seed of small grains and grasses in the ground

in narrow-spaced rows at a uniform depth.

The size of a grain drill is determined by the number of furrow openers and the distance they are spaced apart.

The size can be expressed as 12-6 which means that there are 12 furrow openers spaced 6 inches apart.

Прочитайте предложения, запишите их перевод.

1. Grain drills can be classified as plain drills and fertilizer drills.
2. A plain drill has a seed box and sowing devices for the drilling of seeds only.
3. This drill has a large seed box for seeds and fertilizer.

Запишите русские эквиваленты следующих слов и выражений.

Disc coulters, a device, a sowing device, the front section, the rear section, to provide, to prevent, to arrange;

Прочитайте текст и скажите:

- а) какие части и узлы сеялки упоминаются;
- б) из какого материала они сделаны.

Grain Drill.

The principal parts are the frame., transport and drive wheels, a box for the seeds, a device to feed the seed out of the hopper in uniform quantities, furrow openers, covering devices, a land measure.



The frame is made of angle steel. All parts of the drill are connected to the frame. The wheels are placed on the main axle of the drill. The seed box is made of sheet metal. Furrow openers are made of cast iron. They are used to open the furrows for the seed.

The land measure is an instrument so designed that it determines the number of acres sown.

Grain drills can be classified as plain drills and fertilizer drills.

Озаглавьте абзацы текста.



UNIT № 4

I. Переведите предложения

1. This type of mower has been developed for cutting road-side verges.
2. Tractor mowers can be classified into several types.
3. The machine cannot be considered as an equal alternative to the old model.
4. A new make of machine has proved satisfactory for many years.
5. The trailed mower will fit all makes of tractor.
6. Mounted mowers are the most suitable type when using light tractors.
7. When cut a very heavy crop requires a reduced forward speed of the mower coupled with a high knife speed.

II. Прочитайте текст и выполните следующие после него задания.

Tractor Mowers.

1. Tractor mowers can be classified as front-mounted, mid-mounted, rear-mounted and trailed.

2. Choosing the most suitable type of mower for a given farm depends on many factors. These include the shape, acreage and disposition of fields, type and number of tractors available, the operating width of hay and silage machinery already on the farm and the method of dealing with the crop when cut.

3. The front-mounted mower has been developed primarily for cutting road side verges, banks and ditch sides. It is a very versatile machine but cannot be considered as an equal alternative to the more conventional types if field operation is the main concern.

4. Rear-mounted and semi-mounted mowers have proved satisfactory for many years. The fully mounted model increases the tractive effort of the tractor slightly because its weight is carried by the rear wheels. This is often an advantage when using a light tractor. This mower is also easier to transport than the semi-mounted type.

5. The semi-mounted mower will generally fit a wider range of



tractors, including tractors without hydraulic systems.

6. The trailed mower has been with us longer than any of the types already described. It will fit all makes of tractor and it does not require either a power- take-off shaft or hydraulics. It is very simple to attach and remove.

7. The knife of a trailed mower is landwheel driven and its speed remains constant to the forward speed of the mower. This can be a disadvantage in a very heavy crop which requires a reduced forward speed coupled with a high knife speed, but in most conditions, its performance will be as good as that of any other type of mower.

III. Обратите внимание на перевод следующих слов и словосочетаний в тексте.

Acreage	размер площади в акрах
Road-sideverges	дерн по краям дороги
Banks and ditch sides	насыпиикраярвов
The main concern	(здесь) основнаяцель
Tractive effort	тяговоеусилие

IV. Найдите в тексте английские предложения, адекватные данным русским.

- Она является универсальной машиной, но не может считаться равной альтернативой более традиционным типам, если полевая работа будет основной целью.
- Она подходит всем моделям трактора и не требует ни вала отбора мощности, ни гидравлики.
- Режущий аппарат приводится в действие от полевого колеса.

Озаглавьте абзацы текста.

V. Посоветуйте', какую косилку использовать.

- ... в нашем хозяйстве (см. абзац 2);
- ... для обкоса придорожных полос (см. абзац 3);
- ... при наличии в хозяйстве легкого 'фактора (см. абзац 4);
- ... с учетом удобства транспортировки косилки срабочего



участка на

машинный двор (см. абзац 4);

е) ... если наш трактор не обеспечен гидравлической системой (см. абзац 5).

VI. Ответьте на следующие вопросы:

1. What types of tractor mowers do you know?
2. What factors does mower choosing depend upon?
3. What is the front-mounted mower designed for?
4. Which mowers are better to take when using a light tractor?
5. What tractor does the semi-mounted mower fit?
6. What tractors does the trailed mower fit?
7. What is the knife of a trailed mower driven from?

VII. Пользуясь вопросами как таном, перескажите по-английски текст.

VIII. Прочитайте текст и выполните следующие после него задания.

Knife Maintenance.

1. No matter which sort of mower be chosen, there should be one requirement common to all. The cutterbar assembly must be kept in good condition and correctly aligned if the best possible performance is to be obtained.
2. As a general rule, the knife should be sharpened every two hours or so. Try to preserve the original angles of the knife sections when sharpening them. If a section is loose, renew the rivets or, as second best, hammer the old one tight. If the knife back is bent, it can be straightened cold.
3. Examine the knife for excessive wear under the back and at the head. Pay particular attention to the bolt or shaft which connects the connecting rod to the head. If this is worn excessively, it will shorten the life of the knife, crankpin and connecting rod.
4. The knife supplies half the cutting action, the other half being supplied by the edges of the fingers on which the knife slides. It is necessary to sharpen these edges about once per year. The best me-



thod is lo use a portable sander. If this is not available, the fingers will have to be removed and sharpened on a bench grinder.

I. Ссылаясь на сведения из текста, назовите

- a) ... основной рабочий орган косилки (см. абзац 1);
- b) ... составные части режущего аппарата косилки (см. абзац 4):
- c) ... главное требование к режущему аппарату (см, абзац 1);
- d) ... как часто в ходе работы следует затачивать секции ножа, режущие кромки пальцев режущего аппарата (см. абзац 4);
- e) ... какое приспособление используется для заточки (см. абзац 4).

II. Пользуясь текстом, выберите правильное решение поставленному условию.

Образец: If the field operation is the main concern, the trailed mower is used.

- a) If a good performance of a mower is to be obtained, ...
- b) If a knife section is loose, ...
- c) If the knife back is bent, ...
- d) If shaft which connects the connecting rod to the head is worn, ...