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**АНГЛИЙСКИЙ ЯЗЫК**

*Сборник текстов и упражнений*

*для студентов, обучающихся по специальностям*

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**Английский язык** : сборник текстов и упражнений/ С. Л. Прокопенко, И. В. Осипова. – Горки : БГСХА, 2020. – 40 с.

Приведены тексты для чтения по специальности с последующими упражнениями на расширение лексического запаса, на контроль понимания прочитанного, а также на повторение грамматики в рамках учебной программы.

Для студентов, обучающихся по специальностям 1-74 02 01 Агрономия, 1-74 02 01 Селекция и семеноводство.

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ВВЕДЕНИЕ

Данный сборник текстов и упражнений предназначен для студентов первого курса агрономического факультета, обучающихся по специальностям специальности 1-74 02 01 Агрономия и 1-74 02 02 Селекция и семеноводство.

Цель сборника – заложить основы навыков чтения и перевода текстов по специальности, а также повторить грамматику, изученную ранее. С первых уроков в текстах вводится сельскохозяйственная лексика, которая закрепляется в дальнейшем в устных и письменных упражнениях.

Сборник состоит из десяти уроков. Каждый урок содержит текст с лексическим минимумом, который включает наиболее употребительные в сельскохозяйственных текстах слова и термины и подлежит заучиванию.

Кроме того, урок включает систему упражнений, которые имеют целью проверку понимания содержания прочитанного, закрепление новой терминологии и повторение грамматики в рамках учебной про­граммы.

Для развития навыков беспереводного чтения с общим охватом со­держания текстов в каждый урок включен один небольшой по объему текст. Этот текст тематически и грамматически увязан с основным текстом.

В сборнике также представлены тексты для чтения с учетом уже пройденного лексического и грамматического материала, которые могут быть использованы как для аудиторной, так и для внеаудиторной работы. Имеется также словарь-минимум.

**УРОК 1**

**Упр. 1. Прочитайте и выучите следующие слова:**

agriculture – сельское хозяйство

animal – животное

to apply – применять

to breed (bred) – разводить

crop – культура

cultivation – обработка

to develop – развивать

development – развитие

farm – хозяйство, ферма

food – пища

to grow (grew, grown) – выращивать, расти

growth – рост

to increase – увеличивать

plant – растение

to supply – снабжать

to use – использовать

yield – урожай.

**Упр. 2. Прочитайте и переведите текст.**

**What is agriculture?**

Agriculture is an important branch of economy. Economic growth of any country depends on the development ofagriculture which supplies people with food and clothing and industry with raw materials.

The word "agre" is a Latin word. It means the cultivation of fields in order to grow crops. Now agriculture also includes the use of land to breed farm animals.

We do not know when people began to grow crops, it was many thousand years ago. Now crop production and animal husbandry are highly developed branches of agriculture.

Life is impossible without plants. They play a highly important role in everyday life of people. Plants that are grown by farmers are known as farm crops. They are used for many different purposes. Most of them are used directly as food for people, some are consumed by farm animals, others are used in industry and medicine.

In order to increase crop yields and animal products our collective and state farms apply widely intensive technologies.

**Пояснения к тексту:**

depends on – зависит oт

in order to – чтобы; для того, чтобы

crop production – растениеводство, возделывание сельскохозяйст- венных культур

animal husbandry – животноводство

highly developed – высокоразвитый

most of – большинство.

Упр. 3. Ответьте на следующие вопросы.

1. What does economic growth of any country depend on?
2. What does agriculture supply people with?
3. When did people begin to grow crops?
4. What is the role of plants in everyday life of people?
5. Where are plants used?
6. What is applied in order to increase crop yields?
7. What are the two branches of agriculture?

Упр. 4. Переведите следующие слова и словосочетания на анг­лийский язык.

Растения, важная роль, пища, непосредственно, сельскохозяйствен­ная культура, отрасль экономики, широко использовать, сельскохозяй­ственные животные, интенсивные технологии, увеличивать, потреб­лять, выращивать, урожаи культур, обработка полей.

Упр. 5. Заполните пропуски предложенными ниже словами.

1 . Crop production is an important … of agriculture.

* 1. Agriculture ... people with food.
	2. People began ... crops many thousand years ago.
	3. Plants are used for many different … .
	4. To increase crop … farmers apply intensive technologies.
	5. Plants play a very important … in everyday life of people.

(role, to grow, supplies, branch, purposes, yields)

Личные местоимения

|  |  |  |
| --- | --- | --- |
| Именительный падеж | Объектный падеж | Притяжательный падеж |
|  I–я |  Me – мне, меня |  My – мой |
|  You – ты |  You – тебе, тебя |  Your – твой |
|  He – oн |  Him – ему, его |  His – его |
|  She – она |  Her – ей, ее |  Her – её |
|  It – oн,она,оно |  It − ей, ему |  Its – ее,его |
|  We – мы |  Us – нам,нас |  Our – наш |
|  You – вы |  You – вам, вас |  Your – ваш |
|  They – они |  Them – им, их |  Their – их |

Упр. 6. Вставьте соответствующие личные местоимения в име­нительном падеже.

1. Are ... a student of the Agronomy faculty? – Yes, ... am. 2. My friend is an agronomist. ... is on the farm now. 3. This farm is known in this region. ... is rich and profitable. 4. Most of the farms in England are small. ... are family farms. 5. ... , people, must protect nature. 6. Do ... have any books on agronomy? – Yes, ... do.

**Упр. 7. Вставьте соответствующие личные местоимения в объ­ектном падеже**.

1. People made parks in cities because they liked ... . 2. Plants take water from the soil and transport ... to the leaves. 3. The Japanese grow much rice. They grow ... in standing water in fields. 4. Some plants are used by man directly for food, some are grown by ... for industry. 5. We have used special cultural practices. They helped ... achieve good results. 6. I use fertilizers and other chemicals on my plot. Their use helps ... increase crop yields. 7. Man lives on the Earth because plants give ... oxygen.

**Упр. 8. Вставьте соответствующие притяжательные местоиме­ния.**

1. Plants are very important in ... everyday life. 2. It is necessary to have many trees in a city to make ... air good. 3. Different plant species want ... special soils. 4. Do you know planting dates of wheat in ... country? 5. Timiryazev began ... scientific activities in the field of agriculture in Simbirsk. 6. Who is ... lecturer on plant physiology? − ... lecturer is a well- known scientist. 7. The farm has to irrigate ... fields. 8. The farmers improved ... work with the help of new machines. 9. Plants absorb most of ... nutrients from soil. 10. Now we grow wheat on ... farm.

**Упр. 9. Прочитайте текст и кратко перескажите по-русски.**

**Agriculture in Denmark**

Agriculture is the most important branch of economy in this country. It is highly developed. Big farms are predominant in Denmark.

The country has very favourable climate, soils and topography for farm­ing. These factors stimulate crop growing and animal breeding.

Most farm operations are highly mechanized, from preparation of the soil to harvesting crops and feeding animals. The use of fertilizers and other chemicals increases crop yields and animal products.

England is the main importer of Denmark farm products. Animal pro- ducts make up about 80 % of the total agricultural export of the country.

**УРОК 2**

**Упр. 1. Прочитайте и выучите следующие слова:**

application – применение

livestock – скот

to clean – чистить

to obtain – получать

control – борьба, уничтожение

disease – болезнь

quality – качество

to feed (fed) – кормить

soil – почва

fertilizer – удобрение

variety – сорт

to harvest – убирать

weed – сорняк

insect – насекомое

to plant – сажать.

Упр. 2. Прочитайте и переведите текст.

Intensive technologies in agriculture

There are two ways of increasing the yield of farm crops. They are the cultivation of new lands and the increase in yields per hectare. In the recent past the first way was more popular. At present more agricultural products are obtained by intensification of agricultural production.

Intensification is based on mechanization, electrification and chemiza- tion which are the main sources of progress in agriculture. Most of agricul­tural processes in crop production and animal husbandry are mechanized now. They are the preparation of the soil, planting and harvesting crops, feeding farm animals and cleaning livestock buildings. Chemization of agri­culture is increased by higher production and use of mineral fertilizers and other chemicals. They increase crop yields and quality.

Some other important intensive technologies are the development of better high-yielding varieties of crops, the application of most effective cultural practices, the breeding of better farm animals, the control of weeds, insects and diseases.

All intensification factors must be used in such a way as not to damage the land which is the basis of agriculture.

Пояснения к тексту:

per hectare – сгектара, на гектар

high-yielding – высокоурожайный

cultural practices – агротехнические приемы; агротехника

in such a way – таким образом

as not to damage – чтобы не повредить.

Запомните:

most – самый, наиболее (перед прилагательным)

most; most of – большинство (перед существительным).

Упр. 3. Ответьте на следующие вопросы.

* + 1. What are the two ways of increasing the yield of farm crops?
		2. What are the main sources of progress in agriculture?
		3. What agricultural processes are mechanized now?
		4. How are crop yields and quality increased?
		5. What is the basis of agriculture?

Упр. 4. Переведите следующие слова и словосочетания на анг­лийский язык.

Увеличение, получать, сельскохозяйственное производство, источ­ник, растениеводство, животноводство, посадка, уборка, использова­ние, урожайность, сорт, агротехнические приемы, сорняк, болезнь.

Упр. 5. Замените данные в скобках слова их английскими эк­вивалентами. Переведите предложения на русский язык.

* + - 1. There are two ways of (увеличение) the yield of farm crops.
			2. Most of agricultural processes in (растениеводство и животновод­ство) are mechanized.
			3. At present more agricultural products are obtained by intensification of (сельскохозяйственное производство).
			4. Mineral fertilizers (увеличивают) crop yields and quality.
			5. Some other intensive technologies are the development of better (вы­сокоурожайных сортов) of crops, the application of most effective (агро­технических приемов), the control of (сорняки, насекомые).

Местоимения some, any, no

|  |  |
| --- | --- |
| Утвердительные предложения | Some – некоторый, какой-то, несколько,какой-нибудьAny – всякий, любой |
| Вопросительные предложения | Any – какой-нибудь |
| Отрицательные предложения | No = not any − никакой |

Упр. 6. Употребите подходящие по смыслу неопределенные ме­стоимения: some, any, no.

1. ... crops are used in feeding farm animals. 2. Our farm plants ... of the crops in autumn. 3. There is ... crop more important than wheat. 4. There aren't ... farms in this region growing wheat. 5. ... crop receives more cultivation than potato. 6. Are there ... artificial seas in Belarus? – No, there aren't ... .7. ... lands are unfit for cultivation. 8. This method has ... advantages.

Неопределенные местоимения much, many, (a) little, (a) few

|  |  |  |
| --- | --- | --- |
| much | много | Употребляется с неисчисляемыми существительными |
| many | много | Употребляется с исчисляемыми существительными |
| few | мало | Употребляется с исчисляемыми существительными |
| a few | несколько | Употребляется с исчисляемыми существительными |
| little | мало | Употребляется с неисчисляемыми существительными |
| a little | немного | Употребляется с неисчисляемыми существительными |

Упр. 7. Употребите подходящие по смыслу слова: much, many, few, little, a few, a little.

1. ... crops grown by this farm are high-yielding. 2. ... agricultural pro­cesses are mechanized. 3. Most trees in tropical forests lose only ... leaves. ... sunlight reaches the earth there. 4. Cotton grows well in the steppe but there is ... water there. 5. ... work was done in spring. 6. The farm has got ... farm machinery. 7. There are ... sunny days in winter. 8. Men get ... food from plants. 9. There are ... plant species in the world. 10. The production of meat, milk and eggs increased ... last year.

Упр. 8. Прочитайте текст и кратко перескажите по-русски.

Main sources of food

There are three main sources of food for man. They are crops, livestock and fish. Of these, crops make up about 75 % of the world's food production, 23 % is contributed by livestock and only 2 % of food comes from fish.

Many foods are obtained from farm animals. They are meat, milk and eggs. Milk is often called the nature's most important food.

Meats from farm animals are highly important as food for people. The animals most often used for this purpose are beef cattle, sheep and poultry. Meat from mature sheep is known as mutton.

УРОК 3

Упр. 1. Прочитайте и выучите новые слова:

beef cattle – мясной скот

meat – мясо

dairy cattle – молочный скот

egg – яйцо

nutrient – питательное вещество

favourable – благоприятный

grain – зерно

nutritious – питательный

grass − трава

poultry – домашняя птица

hog – свинья

to produce – производить

to improve – улучшать

sheep – овца, овцы

to keep (kept) – содержать

soil fertility – почвенное плодородие

manure – навоз.

Упр. 2. Прочитайте и переведите текст.

Two branches of agriculture

There are two main branches of agricultural production – crop production and animal husbandry.

Crop production is the practice of growing and harvesting crops. The most important crops grown by man are grain crops, vegetables and grasses. In order to obtain high yields crops are grown under favourable soil and climatic conditions.

Animal husbandry is a branch of agriculture including the breeding of farm animals and their use. Dairy and beef cattle, hogs, sheep, and poultry are widely bred throughout the world. Farm animals are highly important sources of food for man. They are kept for the production of such nutritious products as meat, milk and eggs.

Many crops grown by man are used in feeding livestock. At the same time manure produced by farm animals is an important source for the maintenance of soil fertility. Most of the nutrients taken by plants from the soil are thus returned. Applying manure, farmers improve the physical condition of the soil.

Thus, crop production and animal husbandry are closely connected with each other.

Пояснения к тексту:

under ... conditions – при (в)... условиях

with each other – друг с другом.

Запомните:

some – несколько, некоторый

the same – тот же самый, один и тот же.

Упр. 3. Ответьте на следующие вопросы.

* + - * 1. What are the two main branches of agriculture?
				2. What is crop production?
				3. Name the most important crops grown by man.
				4. What is animal husbandry?
				5. Name farm animals bred throughout the world.
				6. How do farmers improve the physical condition of the soil?

Упр. 4. Дайте английские эквиваленты следующих слов.

Благоприятный, почвенные условия, отрасль, разведение, пита­тельный, кормление, скот, поддержание, плодородие почвы, питатель­ные вещества.

Упр. 5. Составьте словосочетания из предложенных слов:

main a) production

 agricultural b) crops

 favourable с) husbandry

 crop d) branch

 grain e) production

 soil f) cattle

 animal g) conditions

 beef h) source

 nutritious i) fertility

 10) important j) products

Степени сравнения прилагательных

|  |  |  |
| --- | --- | --- |
| Положительная степень | Сравнительная степень | Превосходная степень |
| 1. Old, slow |  Older, slower |  Oldest, slowest |
|  Thin, big |  Thinner, bigger |  Thinnest, biggest |
|  Heavy, easy |  Heavier, easier |  Heaviest, easiest |
| 2. Beautiful |  More beautiful |  Most beautiful |
| 3. Good, well |  Better |  Best |
|  Bad, badly |  Worse |  Worst |
|  Little |  Less |  Least |
|  Many, much |  More |  Most |
|  Far |  Farther, further |  Farthest, furthest |
|  Old |  Older, elder |  Oldest, eldest |

Упр. 6. Поставьте прилагательные и наречия в соответствую­щую степень сравнения.

1. The (favourable) seasons are those of moderate rainfall. 2. The (suit­able) soil for potatoes is a light loam. 3. Our farm has (high) crop yields than last year. 4. Animal husbandry is (important) on this farm than crop production. 5. This cultural practice is (effective) than that one. 6. Wheat grows at a (low) temperature than cotton. 7. Soil air contains (little) oxygen but (much) carbon dioxide than atmospheric air. 8. Rye is (hardy) than wheat. 9. The oceans remain (large) source of water in the world. 10. Barley has a (short) period of growth than other cereals.

Глагол to be (быть) в Present Indefinite Tense

|  |  |  |
| --- | --- | --- |
| Утверждение | Вопрос | Отрицание |
| I **am** | Am I? | I am not |
| He **is** | Is he? | He is not (isn't) |
| She **is** | Is she? | She is not (isn't) |
| It **is** | Is it? | It is not (isn't) |
| We **are** | Are we? | We are not (aren't) |
| You **are** | Are you? | You are not (aren't) |
| They **are** | Are they? | They are not (aren't) |

Упр. **7**. Употребите соответствующую форму глагола to be в Present Indefinite.

1. The principal parts of plants ... roots, stems, leaves, flowers, seeds. 2. Sunlight ... necessary for plants. 3. It ... not warm in this region. 4. There ... many varieties of crops in the world. 5. Cereals ... leading farm crops. 6. The climate of this area... not good for growing fruits. 7. Summer ... rather moist in Britain. 8. Small farms ... usually mixed farms. 9. There ... millions of hectares of farm land in the world. 10. Cooperation in agriculture ... important.

Глагол to have (иметь) в Present Indefinite

|  |  |
| --- | --- |
| I **have** | We **have** |
| He **has** | You **have** |
| She **has** | They **have** |
| It **has** |  |

Упр. 8. Употребите соответствующую форму глагола to have в Present Indefinite.

I. The country ... good soils for farming. 2. Agronomists ... a lot of work in the fields. 3. Deserts ... almost no plant life. 4. Britain ... a mild climate.

5. Plants also ... diseases. 6. Different soils ... the same utility. 7. The greater part of the country ... a continental climate. 8. Organic matter ... many functions in the soil. 9. Water ... no feeding value. 10. These plants ... a long growing season.

Упр. 9. Прочитайте текст и перескажите кратко по-русски.

Plant growing in Japan

Most Japan's land cannot be used for growing crops because it is mountainous. The land that can be used for crop cultivation is used inten­sively in order to provide people with food.

Rice is the most important food for the Japanese people. They grow much rice. It is grown in standing water in fields. When rice is mature the water is drained and the plants are harvested with special machines.

Another very important crop in this country is sweet potato. It is widely grown on the higher lands.

There are also fields of other crops such as wheat, barley and corn.

УРОК 4

Упр. 1. Прочитайте и выучите следующие слова:

to adapt – приспосабливать

moisture – влага

to affect – влиять

proper – надлежащий

air – воздух

to provide – обеспечивать

barley – ячмень

rainfall – осадки

cold – холодный

to require – требовать

corn – кукуруза

sunlight – солнечный свет

cotton – хлопок

warm – теплый

environment – окружающая среда

germination – прорастание

wheat – пшеница

loss – потеря

granary – зернохранилище.

Упр. 2. Прочитайте и переведите текст.

Factors affecting the development of plants

All plants require certain conditions of the environment for their best growth and development. The most important of them are water, soil, sun­light and temperature.

Man cannot regulate the amount of rainfall but he can prevent the loss of moisture from the soil by proper cultivation or by irrigation.

Proper temperature is also essential for crop production. The optimum temperature for germination and growth varies with different kinds of crops. Grain crops such as wheat and barley, for instance, grow at a lower tem­perature than cotton or corn. Many crops are more adapted to the temperate conditions than to colder or warmer environment.

Without sunlight many important processes in plants do not take place. One of them is photosynthesis by which plants produce food from inorganic materials.

Besides water the soil in which crops are grown is to be provided with air and all the necessary nutrients. The most important plant nutrients are nitrogen, phosphorus and potassium. There are at least 14 elements that are essential for proper plant growth. Farmers have to apply the nutrients taken by growing crop from the soil.

In order to produce highest yields, crops should not only be provided with enough water, proper soil and necessary nutrients but they should be well adapted to both soil and climatic conditions.

Пояснения к тексту:

varies with – зависит от

for instance – например

to take place – иметь место, происходить

at least – по крайней мере

both ... and – как..., так и … .

Упр. 3. Ответьте на следующие вопросы.

1. What conditions of the environment are the most important for plants?

2. How can man prevent the loss of moisture from the soil?

3. What crops require temperate conditions for growth?

4. Why is sunlight important for plants?

5. What are the most important plant nutrients?

6. What should man do to produce highest yields?

Упp. 4. Дайте английские эквиваленты следующих слов.

Окружающая среда, осадки, количество, потеря, солнечный свет, прорастание, надлежащий, применять, требовать, существенный, не­обходимый.

Упр. 5. Составьте словосочетания из следующих слов:

1) certain a) processes

2) important b) cultivation

3) crop с) temperature

4) proper d) nutrients

5) optimum e) rainfall

6) inorganic f) conditions

7) plant g) production

8) necessary h) materials

9) temperate i) practices

10) cultural j) growth

Present Indefinite Active

|  |  |  |
| --- | --- | --- |
| Утвердительное предложение | Вопросительное предложение | Отрицательное предложение |
| I **work** | **Do** I **work**? | I **do** not (don't) **work** |
| We **work** | **Do** we **work**? | We **do** not **work** |
| You **work** | **Do** you **work**? | You **don't work**  |
| He **works** | **Does** he **work**? | He **doesn't work** |
| She **works** | **Does** she **work**? | She **doesn't work** |
| It **works** | **Does** it **work?** | It **doesn't work** |
| Thcy **work** | **Do** they **work**? | They **don't work** |

Упр. 6. Поставьте глаголы в скобках в Present Indefinite Tense.

1. Every year students (to help) farmers gather harvest.
2. Many lorries (to take) the grain to the granary every autumn.
3. In summer my sister (to work) at the granary. She (to weigh) the grain and (to make) notes in her register.
4. Usually two men (to drive) a combine-harvester.
5. Many collective farms (to cultivate) tomatoes?

6. Using fertilizers (to help) the plants grow and develop.

1. Different chemicals (to act) on plants in different ways.
2. Wheat (to belong) to the grass family.
3. British farmers (to cultivate) rye as a forage crop.

Упр. 7. Поставьте следующие предложения в Present Indefinite в вопросительную и отрицательную формы.

1. These factors stimulate crop growing.
2. Farmers usually obtain high yields of crops.
3. The farm grows many crops.
4. The use of fertilizers increases crop yields.
5. Plants take nutrients from the soil.
6. We control weeds with special cultural practices.
7. They plough land in summer.

Упр. 8. Прочитайте текст и перескажите кратко по-русски.

Agriculture and environment

Agriculture and environment are closely connected with each other. Crop yields and animal productivity depend on soil and climatic conditions of the region in which they are grown. When environmental conditions are favorable, crops grow and develop well and produce high yields.

At present agriculture is not so dependent on the environment as in the past. Man can improve the conditions under which crops are grown. The conditions can be improved by using irrigation and drainage, by applying fertilizers and different chemicals such as herbicides and insecticides and by some other practices.

The environmental factors do not only affect agriculture, but they are also affected by the agricultural activity. Mineral fertilizers and chemicals used by farmers accumulate in the soil and in plants and may become harmful for people.

УРОК 5

Упр. 1. Выучите следующие слова и словосочетания:

to absorb – поглощать, всасывать

root – корень

alfalfa – люцерна

root crop – корнеплод

fibrous – мочковатый (о корне)

seed – семя

flower – цветок

source – источник

ground – земля, грунт

stem – стебель

leaf (pl. leaves) – лист

sugar beet – сахарная свекла

legume – бобовое растение

tap – стержневой (о корне)

to obtain – получать

anchor – держать

Упр. 2. Прочитайте и переведите текст.

Plant, its parts and their functions

Plants are highly important sources of food for man and farm animals. They also supply people with clothing, shelter and many other things as well.

To obtain high yields of farm crops it is necessary to study the principal parts of the plant and their functions.

The principal parts of a plant are the root system and the above ground portion consisting of stems, leaves, flowers and seeds.

The root performs two main functions. It absorbs plant nutrients as well as water from the soil and anchors the plant. There are two types of roots: fibrous roots and tap roots. All grain crops have fibrous roots, while tap roots are typical of legumes and root crops. Alfalfa and sugar beets are examples of crops having tap roots.

As to stems and leaves they are usually above the ground. To support leaves and to conduct water and nutrients from the roots to the leaves are the main functions of the stem. The food used by green plants is produced in the leaves through the process known as photosynthesis.

A flower is the part of the plant where seeds are produced. Thus, to pro­duce seeds the plant must have flowers.

All parts of a plant must be developed well in order to function properly. If conditions for plant growth are not favorable the plant will be weak to develop its parts well.

Пояснение к тексту:

above ground portion – надземная часть.

Запомните:

as – так как; как; когда; по мере того, как

as well – тоже, также

as well as – так же как; а также

as to – что касается.

Упр. 3. Ответьте на следующие вопросы.

1. What do plants supply people with?

2. What is necessary to study in order to obtain high yields of farm crops?

3. What types of roots are there?

4. What are the principle parts of a plant?

5. Where is the food used by green plants produced?

6. Why must the plant have flowers?

7. When is the plant weak?

Упр. 4. Переведите следующие слова и словосочетания на анг­лийский язык.

Корневая система, зерновые культуры, благоприятные условия, корнеплоды, питательные вещества, состоять, источник питания, по­средством, использовать, сахарная свекла, изучать, получать высокие урожаи, основные функции.

Упр. 5. Дополните предложения, используя слова к тексту.

1. Roots ... nutrients and water from the soil.
2. All grain crops have ... roots.
3. ... roots are typical of legumes and root crops.
4. To support leaves and to conduct water and nutrients are the main functions of ... .
5. Seeds are ... in a flower.
6. If conditions for plant growth are not good the plant will be ... .

Упр. 6. Раскройте скобки и переведите предложения на русский **язык.**

1. Plants are (очень важный) source of food.

2. It is (необходимо) to study the principle parts of the plants.

3. The principle parts of a plant are the root system and (надземная часть).

4. The root (выполняют) two main functions.

5. As to stems and leaves they are (обычно) above the ground.

6. A flower is the part of the plant where seeds (производятся).

Глагол tо be в Past Indefinite

|  |  |
| --- | --- |
| Единственное число | Множественное число |
| I, he, she, it **–** was | We, you, they – were |

Упр. 7. Поставьте соответствующую форму глагола to be в Past Indefinite.

1. Belarus ... an agrarian country at the beginning of the 20th century.

2. The life of the peasants ... extremely hard.

3. Agricultural technique ... at a very low level.

4. Even the plow ... a luxury for a peasant.

5. The 'sohha', the harrow, the spade, the scythe and the sickle ... about all the tools of the peasants.

6. Land ... private property.

7. Prominent scientists ... working for better varieties of plants, higher yields, improved breeds of cattle.

8. Big landowners ... the first who introduced new ideas into practice.

9. After the Revolution in 1917 land ... proclaimed national property.

10. All the lands ... confiscated and handed over to those who cultivated them.

Упр. 8. Образуйте вопросительные и отрицательные предложе­ния из предложенных ниже утвердительных предложений.

1. My friend was a first-year student last year.

2. It was easy to seed the vegetable garden.

3. Barley was one of the most ancient of cultivated plants.

4. Climate conditions were favourable for cereal crops last year.

5. Plant diseases were difficult to control in the past.

Упр. 9. Поставьте глагол to have в Past Indefinite и образуйте вопросительную и отрицательную формы.

1. Students ... their practice at the experimental farm last year.
2. Farmers ... their own homesteads.
3. Farmers ... a number of chemicals to control weeds, pests, fungi.
4. Plant breeders ... varieties with almost all desired properties.
5. This method of tillage ... broad application in the past.
6. New fertilizers ... many important advantages.
7. Cotton ... the commercial value many years ago.
8. Watering always ... great influence on plant growing.
9. New varieties ... greater resistance to low temperature.
10. This cultural practices ... great effect on crop production.

Упр. 10. Прочитайте текст и кратко перескажите по-русски.

Agriculture and the quality of our environment

There are four main ways in which agriculture affects our environment. The first way is soil erosion. It is a natural process but it can be greatly in­creased when improper methods of farming are used. The second way is wastes of intensive keeping of livestock and poultry. These wastes pollute waterways. The third way is improper use of fertilizers. And the last way of agricultural pollution of the environment is the use of different chemicals such as insecticides, herbicides and others. These chemicals affect both the soil and air.

**УРОК 6**

Упр. 1. Выучите следующие слова и словосочетания:

annual – однолетний, однолетнее растение

growing season – вегетационный период

biennial – двухлетний, двухлетнее растение

hay – сено

oats – овес

cereal crop – хлебная (зерновая) культура

pasture – пастбище

to cultivate – возделывать

feed – корм

potatoes – картофель

forage crop – фуражная (кормовая) культура

silage – силос

perennial – многолетнее растение

rye – рожь

legumes – бобовые

radish – редис

tuber crops – клубнеплоды.

Упр. 2. Прочитайте и переведите текст.

Classification of field crops

Crops are variously grouped and classified. They may be classified as cultivated crops such as potatoes and corn or as non-cultivated crops such as wheat or barley.

Crops may also be grouped according to the duration of their growth. Annual crops complete their life cycle in one growing season. Biennials require two seasons to produce seed. Perennials grow for more than two seasons, producing seed each year.

According to their use field crops may be classified into many groups. The most important of them are:

1. Cereal or Grain Crops. A cereal is a grass grown for its edible grain. Wheat, corn, rye, barley, oats and rice are the most important grain crops.

2. Legumes for Seed. The principal legumes grown for seed are field peas, field beans and soybeans. Sometimes the aim of growing them is to improve soil fertility because they are able to fix atmospheric nitrogen through the bacteria living on their roots.

* 1. Forage Crops. These are the crops used as feed for farm animals in the form of pasture, hay or silage. Most of them are perennials.
	2. Root Crops. Unlike cereals root crops are grown because of the food value of their roots. There are many root crops grown by man. They are sugar beet, carrots, radishes and others. They are biennials.
	3. TuberCrops. The most important tuber crop cultivated throughout the world is potatoes. Like root crops they are biennials but people grow them as annuals.

Пояснения к тексту:

cultivated crops – пропашные культуры

according to – согласно чему-либо.

Запомните:

like – подобно

unlike – в отличие от

because – потому что

because of – из-за, благодаря.

Упр. 3. Ответьте на вопросы к тексту.

* + 1. How may crops be classified?
		2. How long do perennials grow?
		3. Are field crops classified into many groups according to their use? What are they?
		4. What is a cereal?
		5. Can you name the principle legumes?
		6. Where are forage crops used?
		7. What are root crops?

8. What is the most important tuber crop?

Упр. 4. Раскройте скобки и переведите предложения.

* + - 1. Crops may be classified as (пропашные культуры) and noncultivated crops.
			2. Crops may also be grouped according to (продолжительности их роста).
			3. (Согласно) their use field crops are classified into many groups.
			4. (Зерновая культура) is a grass grown for its edible grain.
			5. (Основные бобовые культуры) are field peas, beans and soybeans.
			6. (Фуражные культуры) are used as feed for farm animals.
			7. (Корнеплоды) are sugar beet, carrots and others.
			8. The most important tuber crop is (картофель).

Упр. 5. Задайте вопросы к следующим предложениям, исполь­зуя слова в скобках.

* + - * 1. Scientists classify crops as cultivated and non-cultivated crops. (Do...?)
				2. Perennials grow for more than two years. (What ... ?)
				3. The most important grain crops are cereals, legumes, forage crops and others. (What ... ?)
				4. Farmers grow cereals for their edible grain. (What ... for ?)
				5. We grow root crops because of the value of their roots. (Why ... ?)

Past Indefinite Active

|  |  |  |
| --- | --- | --- |
| Утвердительное предложение | Вопросительное предложение | Отрицательное предложение |
| I work**ed** (went) We work**ed** (went)\ You work**ed** (went) He work**ed** (went)\ She work**ed** (went) It work**ed**They work**ed** (went) | **Did** I work (go)**Did** we work (go)?**Did** you work (go)? **Did** he work (go)? **Did** she work (go)? **Did** it work (go)? **Did** they work (go)? | I **didn't** ( did not) work (go) We **didn't** work (go) You **didn't** work (go) He **didn't** work (go) She **didn't** work (go) It **didn't** work (go)They **didn't** work (go) |

Упр. 6. Поставьте глаголы в скобках в Past Indefinite.

This farm (to grow) many root crops last year.

Farmers (to use) forage crops as feed for farm animals.

Legumes (to improve) soil fertility.

People (to cultivate) potatoes throughout the world.

We (to get) high yields of field beans last year.

* 1. Last year this farm (to harvest) cereals in August.
	2. 7. Plants (develop) well last year due to warm weather.

Упр. 7. Составьте вопросительные и отрицательные предложения из предложенных в упражнении 6.

Упр. 8. Прочитайте и кратко перескажите текст по-русски.

From seeds to plants

Seed starts to germinate only under certain conditions. The optimum temperature at which seeds germinate best varies with different kinds of seed. The optimum temperature for the germination of wheat is about 27 ºC. Cotton and corn germinate best at about 35 °C.

Seeds of all crops need enough air for germination as oxygen is necessary for certain chemical reactions which take place in the plant food in the seed.

These reactions take place only when water is present. So, moisture is also necessary for the germination of seeds.

Thus, a seed does not germinate: 1) if the temperature is not proper, 2) if there is not enough moisture and air in the soil.

УРОК 7

Упр. 1. Выучите следующие слова и словосочетания:

area – площадь

to raise – выращивать

common – обычный, распространенный

to seed – сеять

seedbed – пашня

to drill – сеять рядовой сеялкой

spring crop – яровая культура

fine soil – мелкокомковатая почва

to store – хранить

valuable – ценный

to mature – созревать

winter crop – озимая культура

mellow soil – рыхлая (спелая) почва.

Упр. 2. Прочитайте и переведите текст.

Cereal or grain crops

Cereals are those members of the grass family which produce edible seed. Wheat, barley, rye, oats, corn and rice are the most common and most valuable cereals. The cereals grown in the temperate zone are known as small grains. They are wheat, barley, oats and rye. They may be spring or winter annuals. Corn and rice are warm season crops. They are seeded in spring or early summer and mature in the fall.

Of the cereals raised wheat, rice and corn are the world's three most im­portant grain crops. Although rice is the main food of more people, wheat is the first in importance as to the area sown and the total annual production.

There are some reasons why cereals are considered to be the man's leading food source. They produce food in a relatively short period of time for they are annuals. In addition, they are adapted well to different soil and climatic conditions. Cultural practices required in growing grain crops are quite similar. Grain is easily drilled, harvested, cleaned and stored. All these operations are highly mechanized.

For cereals to grow well they are to be grown on moderately fine and mellow seedbed supplied with enough moisture.

Though cereals do not supply much protein and vitamins, they remain a major source of food for people.

**Пояснения к тексту:**

small grains – хлебные зерновые культуры

in the fall – осенью

of – из

in addition – кроме того.

**Запомните:**

for – для, в течение; так как (обычно после запятой); чтобы.

**Упр. 3. Ответьте на следующие вопросы.**

1. What are cereals?

What are small grains?

When are corn and rice seeded?

Name the world's three most important grain crops.

Is rice the main food of many people?

How well are cereals adopted to different climatic conditions?

What cultural practices are required in growing grain crops?

Are all operations in growing grain crops mechanized?

Cereals are to be grown on fine and mellow seedbed, aren't they?

10. Do cereals supply much or little protein?

**Упр. 4. Определите, верны или неверные следующие высказывания. Исправьте неверные.**

1. Cereals produce seeds which people can eat.

Cereals grow in cool and wet weather.

Wheat is a cereal.

Cereals are only spring annuals.

Wheat, rice and corn are the most important grain crops.

Cereals are not the man's leading food source.

7. Cereals need little water.

8. Cereals do not supply much protein.

Упр. 5. **Составьте словосочетания из следующих слов:**

1. grass a) crops
2. grain b) production
3. food c) zone
4. mellow d) period
5. valuable e) family
6. annual f) source
7. short g) cereals
8. temperate h) seedbed

Упр. 6. Подтвердите словами из текста следующие высказыва­ния.

* 1. People can eat grains of cereals.
	2. People grow more wheat than any other cereals.
	3. Cereals produce seed in a short period of time.
	4. Cereals need proper conditions for their growth.
	5. Cereals are an important source of food.

Future Indefinite Active

|  |  |  |
| --- | --- | --- |
| Утвердительное предложение | Вопросительное предложение | Отрицательное предложение |
| I **will** work He **will** workWe **will** workShe **will** work It **will** work They **will** workYou **will** work  | **Will** I work? **Will** he work?**Will** she work ?**Will** it work?**Will** we work? **Will** you work ? **Will** they work? | I **won't** (will not) work He **will not** workShe **will not** workIt **will not** workWe **won't** (will not) work You **will not** work They **will not** work |

Упр. 7. Поставьте глаголы в скобках в Future Indefinite.

* + 1. These cereals (to produce) edible grains in autumn.
		2. Corn and rice (to need) warm weather.
		3. Wheat, rice and corn (to become) the three most important grain crops in future.
		4. Small grain crops (to grow) in the temperate climatic zone.
		5. Cereals (to supply) little protein.
		6. Farmers (to seed) corn later than rye.
		7. Cereals (to remain) a major source of food for people in future.
		8. Growing grain crops (to require) some cultural practices.

Упр. 8. Составьте вопросительные и отрицательные предло­жения из предложенных в упражнении 7.

Упр. 9. Прочитайте текст и кратко перескажите по-русски.

Photosynthesis

The most important difference between plants and animals is that plants can produce food in the leaves. The process by which plants produce their food is known as photosynthesis.

The conditions necessary for photosynthesis are light, carbon dioxide, water, some essential nutrients and proper temperature. Water and nutrients required for photosynthesis come from the soil through the roots. So, leaves function well if the plant has a highly-developed root system.

The word photosynthesis consists of two parts: *p*hoto which is light and synthesis which is building. So, photosynthesis is building with light.

УРОК 8

Упр. 1. Выучите следующие слова и словосочетания:

coarse seed – крупное семя

to plow – пахать

depth – глубина

firm seedbed – уплотненная пашня

to reduce – уменьшать, сокращать

fine seed – мелкое семя

to roll – прикатывать (почву)

grower – фермер, земледелец

size – размер

level seedbed – ровная пашня

stand – всходы, травостой

to perform – выполнять

tillage – обработка земли

rate – норма.

Упр. 2. Прочитайте и переведите текст.

Cultural practices

Before planting a grower must perform some tillage operations that insure proper environment for germination. The first tillage operation is plowing. It may be done either in the fall or in spring, depending on the crop and the region. Harrowing and rolling are the operations that insure a level and firm seedbed.

Nowadays the traditional tillage practices are increasingly replaced by minimum tillage. Under minimum tillage the number of operations is re­duced. Farm machines can prepare the soil, apply fertilizers and plant the seed in one operation. Main advantages of this method are lower soil com­paction and lower labour and energy costs.

Planting the seed is usually done when the soil and the air are warm enough. For cereals to germinate well two factors must be controlled during planting: depth and rate. Everybody knows that the depth of planting the seed depends largely on the type of the soil and the size of the seed. The coarse seeds of corn and peas are planted much deeper than fine seeds of clover or alfalfa. The establishment of high-quality stand is also favoured by a proper seeding rate. Too thick or too thin sowing lowers grain production.

Harvesting is the last cultural practice. Mechanical harvesting helps farmers obtain highest yields of good quality.

Пояснения к тексту:

either ... or – или ... или

depending on – в зависимости от

largely – в основном

thick sowing – загущенный посев

thin sowing – редкий посев.

Запомните:

too – тоже, также (в конце предложения); слишком (перед прилага­тельным или наречием)

much – много (перед существительным); намного, значительно (пе­ред прилагательным ими наречием в сравнительной степени).

Упр. 3. Ответьте на следующие вопросы.

1. What is the first tillage operation?

* + - 1. What other tillage operations are necessary before planting?
			2. What factors are important during planting?
			3. What are the advantages of minimum tillage?
			4. When is planting the seed done?
			5. What must be controlled during planting?
			6. What is the last cultural practice?

Упр. 4. Переведите следующие слова и словосочетания на анг­лийский язык.

Растениевод, глубина посева, зависить от, хорошее качество, про­растание, мелкое зерно, достаточно тёплый, норма посева, тип почвы, сокращать, главное преимущество, вносить удобрения, боронование, пахать.

Упр. 5. Заполните пропуски подходящими по смыслу словами из текста и переведите предложения.

* + - * 1. Coarse seeds are planted deeper than … .
				2. When the soil and air are … we begin planting the seed.
				3. The depth of sowing depends on the seed ... .
				4. Farm ... prepare the soil, apply fertilizers, and plant the seed in one operation.
				5. Too thick or too thin ... lowers grain production.

Упр. 6. Найдите в тексте и переведите предложения, в которых говорится:

а) о времени проведения вспашки; б) о том, как получают уплот­нённую пашню; в) о преимуществах минимальной обработки земли, г) от чего зависит глубина посева; д) какие культуры заделывают глубже; е) что влияет на получение высококачественного травостоя.

Упр. 7. Поставьте глаголы в скобках в одном из времен группы Indefinite.

Fertilizers (to improve) soil fertility.

Flowers (to produce) many seeds last year.

Our farm (to use) only improved varieties of crop plants next year.

Most of forage crops (to be) perennials.

Many collective farms of our region (to cultivate) this new corn vari­ety last year.

Rice (to be) a warm season crop.

Our agronomist (to say) the farm (to produce) high quality potatoes next year.

Under minimum tillage the farmers (to reduce) the number of opera­tions in future.

We (to apply) phosphorus in order to increase the effectiveness of manure.

Modal Verbs

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Модальный глагол или егоэквивалент | Выражает | Present | Past | Future |
| саnto be able to | физическую или умственную способность совершения действия | canam, is, are able toмогу, умею | could,was, were able toмог, умел | shall, will be able to – сможет, сумеет |
| mayto be allowed to | разрешение, просьбу | may,am, is, are able toможете, можно | mightwas, were allowed to – разрешили | shall, will be allowed to разрешат |
| must | долженствова­ние,необходимостьсовершениядействия | must- должен | had toдолжен был |  |
| have to | необходимостьдействия в зависимости от обстоятельств | have toприходится | had toдолжен был | shall, will have toпридется |
| be to | необходимость совершения действия,заранее запланированно- го или по договоренности | am, is are to должен, обязан | was, were to должен был |  |
| should | рекомендации к действию, совет | shouldдолжен, следует, рекомендуется |  |  |
| would | просьбы, желания | wouldбудьте добры |  |   |
| ought to | моральный долг | ought to следовало бы |   |   |

**Упр. 8. Употребите подходящие по смыслу модальные глаголы can, may, must в нужной форме.**

1. Before planting a grower … perform some tillage operations.
2. Plowing … be done either in the fall or in spring.
3. Farm machines … prepare the soil and apply fertilizers.
4. For cereals to germinate well depth and rate … be controlled.
5. Under minimum tillage the farmers … reduce the number of operations in future.
6. The depth of sowing … depend on the seed size.
7. When the soil and air are warm enough we … begin planting the seed.
8. Flowers … produce many seeds last year.

Упр. 9. Прочитайте текст и кратко перескажите по-русски.

Life Cycle

Many important crop plants complete their life cycle in one growing season. Such plants are spring annuals planted in spring and harvested in autumn. There are also winter annuals planted in autumn and harvested next summer. Winter wheat is an example of winter annuals and corn is a typical spring annual.

Some plants start their growth in one season but produce seeds and die at the end of the second season. They are biennials. Sugar beet is a good example of a biennial plant.

Many plants grow for more than two seasons. Most of our hay and pas­ture crops are perennials.

УРОК 9

**Упр. 1. Выучите следующие слова.**

diversification – разнообразие, смена культур

benefit − прибыль, выгода

conventional tillаgе– обычная обработка почвы

fallow − земля под паром

residue − остаток

**Упр. 2. Обсудите вопросы перед прочтением текста.**

1. How can conventional tilling damage soil?

2. What are some types of cropping systems? What are their strengths and weaknesses?

**Упр. 3. Прочитайте текст и выберите правильный ответ.**

1. What is the passage mostly about?

**A** the price of conventional tillage

**B** the environmental effects of fertilizer

**C** the diversification of crop systems

**D** the market price for various crops

2**.** Which is NOT advice given in the passage?

**A** research the market for crops

**B** select a method of crop diversification

**C** contact the agricultural extension office

**D** use herbicides after diversification

3. What is the drawback to a fallow field?

**A** It results in less available land for crops

**B** It has herbicide residues that harm crops

**C** It becomes less suitable for polyculture

**D** It must be fertilized before planting again

**Diversification**

Farmers benefit from understanding diversification. This text outlines benefits of *diversifying* and some ways to do it*.*

*Why diversity?* – Diversifying a crop system offers farmers economic and environmental benefits.

Many farmers use *conventional tillage* because they think it is cheaper. That is not always true in the long term. *Conservation tillage* methods that rely on diversification can be more expensive at first. However, they protect the long-term health of the soil.

There are environmental benefits as well. Diversified fields are healthier. Farmers often find they use fewer fertilizer and *burn-down herbicides* after they diversify.

How to diversify. – We suggest you start by contacting your local agricultural extension office. They can help you make informed decisions about which crops are most suitable.

Next, you need to research the market for these crops. Determinate which crops are economical.

Finally, consider if you want to use *crop rotation* of *polyculture.* With the former, farmers often leave a section of their fields *fallow.* If they also use *zero tillage* methods, they will leave *crop residues* in place. Unfortunately, fallow fields mean less available cropland at a given time. On the other hand, many popular crops, such as *winter wheat* and *spring wheat,* are not suitable for polyculture. So making this decision requires careful though.

**Упр. 4.** **Соедините** **слова (1–6) с их определениями (A–F).**

1. – fallow 4. – conventional tillage

2. – zero tillage 5. – crop residue

3 – polyculture 6. – spring wheat

**A.** parts of plants left the field after harvest

**B.** growing different plants in the same field

**C.** having no crops

**D.** the standard cropping system

**E.** a crop that is harvested in summer or fall

**F**. a technique for growing crops without tilling

**Упр**. **5**. **Напишите синонимы к подчеркнутым словам.**

1.A practice that prevents water and soil loss protects fields.

\_o\_ \_ \_ \_ \_ \_t\_ \_n t\_ \_ \_ \_ \_e

2. Wheat that is planted in the fall is harvested in the spring.

w\_ \_ \_ \_ \_ w\_ \_ \_ \_

3. Use the weedkiller before planting.

\_ \_ \_ \_n-d\_ \_ \_ \_ e\_ \_ \_ \_ \_ \_e

4.The process of growing different crops one after the other on a field improves soil quality.

 c \_ \_ \_ r\_ \_ \_ \_ \_ \_n

5.There are several methods of growing crops.

\_ \_ \_ p…..s\_ \_ \_ s

6.Increase the variety of your crops to reduce fertilizer use.

d \_ \_ \_ r\_ \_ \_

**УРОК 10**

**Упр. 1. Выучите следующие слова.**

challenge – проблема, сложная задача

precipitous – крутой, стремительный

**Упр. 2. Перед прочтением текста ответьте на вопросы.**

1**.** How long are the growing seasons in your country?

2**.** How can farmers extend growing season?

**Упр. 3. Прочитайте и переведите текст.**

**The Challenges of Growing Season**

One of the most critical concerns for any agriculturalist is the changing of seasons. Specifically, the decline in temperature often sharp and precipitous, that occurs as each fall turns to winter. Plants have varying degrees of tolerance for cold, so different strategies for coping with the cold may be used with each type of crop. Next to the characteristics of the plants themselves, the most important issue to consider is site selection.

Each agricultural site has its own unique characteristics. Different sites have differing growing seasons based on elevation, growing degree days, and last frost dates. For example, one site may have very high growing degree days, while in another area, the mean temperature may barely rise over the base temperature. Agriculturists can protect their crops from the cold by selecting sites with long photoperiods and higher mean temperatures.

Of course, selecting a new site isn’t always an option. After all, humans have cultivated crops in nearly every region on Earth. Less favorable sites may require special care. For example, there are several method of freeze protection that an agriculturist can use. Greenhouses and hoop houses can be used to absorb and trap whatever heat the region does receive. Additionally, heaters can be used to raise the temperature of the air around trees.

**Упр.4. Отметьте следующие утверждения как верные (T) или неверные (F).**

1. The author believes site selection is the most important aspect of planting crops.

2. Areas with short photoperiods have colder temperatures.

3. Hoop houses increase temperature.

**Упр. 5. Соотнесите слова (1–6) с их определениями(A–F).**

1. base temperature; 2. last frost date; 3. Greenhouse; 4. site selection; 5. mean temperature; 6. growing degree day.

A. the act of choosing a place to plant crops

B. the last day during which plants may freeze

C. the minimum temperature at which plants may grow

D. a structure that retains solar energy

E. the average temperature in an area

F. a measure of how much heat a plant will receive in a day.

**Упр. 6. Напишите синонимы к подчеркнутым словам.**

1. Long amounts of time that plants are exposed to light produce strong plants.

p\_ \_ \_ \_p \_ \_ \_ \_ \_s

* + 1. The structure with a curved roof that traps heat allows farmers to grow in cold seasons.

\_ o \_ \_ o \_ \_ \_

* + 1. Janet’s farm is at a higher height of an area relative to the ocean level.

\_ l \_ \_ \_ \_ \_ \_ n

* + 1. Preventing crops from freezing saved the harvest last winter

\_ r e \_ \_ \_ p \_ \_ \_ \_ \_ t \_ \_ \_

* + 1. Norman wants to start a farm in an area with a long period during which plants grow

g \_ \_ \_ \_ \_ g \_ e \_ \_ \_ \_

 6. Get a device that burns fuel to create heat to keep the plants from freezing

\_ \_ a \_ \_ \_

ТЕКСТЫ ДЛЯ ДОПОЛНИТЕЛЬНОГО ЧТЕНИЯ

**Agriculture**

Nature was generous in giving the United States plenty of fertile soil, along with a climate that is mostly moderate. Forty-seven percent of the land area of the United States is farmland. Some 375 million acres (152 million hectares) are permanent pastureland. Almost 50 million acres (20 million hectares) of the cropland is irrigated.

There are about 2370000 farms. The average size is 437 acres (177 hectares), but in the eastern part of the country many farms are much smaller and family members do most of the work.

Over the past 50 years farm population has decreased greatly, so that by today only about 5,6 million persons live on farms. Nevertheless, there has been a tremendous increase in production. Besides providing ample food for its own people, the United States for years has sent millions of kilograms of food to other countries. The principal crops are corn (maize), wheat, cotton, tobacco and fruit.

Scientific methods of farming, including development of sturdy disease-resistant hybrid seeds and the use of machines, are responsible for the production increase. Over 1 million machines (combines) for harvesting grain and some 5 million tractors are in use. In fact, tractors have reduced the need for work animals so much that 80 million acres (32 million hectares) once used to grow feed for the animals are now available for other crops.

Uses of fertilizers and chemicals to control or destroy weeds and harmful insects, and improved methods to control plant and animal diseases have boosted farm production. Modern methods of canning, storing, packaging and marketing farm products avoid spoilage and make it possible for consumers to enjoy perishable foods not only during the growing season but year-round.

Grain crops

The Cycle of Plant Growth

A given species of plants may be thought of as having a definite cycle of growth carrying it from seed stage to seed stage. In general, the phases of this cycle are (1) germination, (2) seedling growth, (3) active or developmental growth, (4) reproduction, (5) maturation, and (6) dormancy. Each part of the cycle presents certain problems pertinent to crop production.

Germination

The ability of a seed to germinate is based upon both genetic and physi­ologic factors. Proper maturation, and the storage of seeds under favorable environmental conditions contribute much to their ability to germinate. If it is assumed that the seed was stored properly, it may be expected to germinate when placed under the proper environmental conditions of heat, water, and aeration. For example, corn is not planted until the ground is warm, while wheat, oats, barley, and flax may be seeded in soil that is rather cold. Usually in the spring of the year, when most small grains are planted, seeding must be delayed until the excess water has been drained or evaporated from the soil. The presence at an excess of water is closely allied to aeration, since a wet soil will not possess enough oxygen for optimum germination. This is one of the most common causes of poor germination of seeds, particularly of corn, during a period of cold, rainy weather. Other unfavorable environmental conditions, such as the presence of disease organisms, may also prevent normal germination.

**Seedling Growth**

The cultivated crops such as corn and the sorghum respond to tillage in their early period of growth and it is important that tillage be as deep and as close to the plants as possible to provide good aeration for the developing roots. In the small grain crops, the seedling stage is important because a fa- vourable environment at this time may result in the development of many tillers or stools and increase the number of potential fruiting stems.

**Active or Developmental Growth**

It is difficult to differentiate between the seedling stage and that of acive growth. During active growth the plant should be so cultivated and fertilized that there is no interruption in its vital growth processes. It is in this stage that the small grain plant heads and the corn and sorghum plants elongate rapidly and prepare for the production of flowers. A drought at this time may greatly reduce the yield. The strong, vigorous plant is much less suffer damage from the many plant diseases such as black stem rust and the smuts, and from other parasitic organisms.

Reproduction

It is Nature's rule that the plant perpetuate its kind. In the annual seed bearing plant, the formation of seed is essential to reproduction. Early seedling and rapid growth are desirable to avoid the hot summer weather at the time when the grain crop produces its flowers.

Most of the small grain crops are self-pollinated, i.e. the flowers contain both male and female organs, and fertilization usually occurs within the individual flower. Of the grain crops, corn and rye are cross-pollinated; pollen from one plant is carried by the wind to the flowers of another plant. The sorghums have both, male and female flowers on the flowering stalk, and while self-pollination is normally more frequent than cross-pollination, considerable cross-pollination may occur.

Maturation

Following pollination and fertilization, the embryo develops and the seed is formed. During the period of active development, the seed contains much water, but the water content is gradually reduced until the seed reaches a stage when it may be said to be mature.

Dormancy

The period of dormancy is a natural follow-up of maturation. Some seeds have a period of after-ripening and will not geminate even when placed under favorable conditions. Generally this period is short for the grain crops, although trouble may be experienced where winter wheat is seeded soon after harvest.

**Environmental Factors**

While the response of different species of plants is dependent upon their genetic make-up, the factors of environment also play a most important part in crop production. Each of the grain species is directly affected by the envi­ronment in which it is grown. In fact, these factors limit the growing of the species to certain sections of the world. The most important factors of envi­ronment are (1) soil, (2) rainfall, (3) temperature and length of growing sea­son, (4) light, and (5) air movements.

**ЛЕКСИЧЕСКИЙ МИНИМУМ**

to absorb – поглощать, всасывать

to adapt – приспособлять

to affect – влиять

agriculture – сельское хозяйство

air – воздух

alfalfa – люцерна

anchor – держать

animal – животное

annual – однолетний, однолетнее растение

application – применение

to apply – применять

area – площадь

barley – ячмень

beef cattle – мясной скот

biennial – двухлетний, двухлетнее растение

to breed (bred) – разводить

cereal crop – хлебная (зерновая) культура

to clean – чистить

coarse seed – крупное семя

cold – холодный

common – обычный, распространенный

control – борьба, уничтожение

corn – кукуруза

cotton – хлопок

crop – культура

to cultivate – возделывать

cultivation – обработка

dairy cattle – молочный скот

depth – глубина

to develop – развивать

development – развитие

disease – болезнь

to drill – сеять рядовой сеялкой

egg – яйцо

environment – окружающая среда

farm – хозяйство, ферма

favourable – благоприятный

feed – корм

to feed (fed) – кормить

fertilizer – удобрение

fertility – плодородие

fertile – плодородный

fibrous – мочковатый (о корне)

fine seed – мелкое семя

fine soil – мелкокомковатая почва

firm seedbed – уплотненная пашня

flower – цветок

food – пища

forage crop – фуражная (кормовая) культура

germination – прорастание

grain – зерно

granary – зернохранилище

grass – трава

ground – земля, грунт

to grow (grew, grown) – выращивать, расти

grower – фермер, земледелец

growing season – вегетационный период

growth – рост

to harvest – убирать

hay – сено

hog – свинья

to improve – улучшать

to increase – увеличивать

insect – насекомое

to keep (kept) – содержать

leaf (pl. leaves) – лист

legume – бобовое растение

legumes – бобовые

level seedbed – ровная пашня

livestock – скот

loss – потеря

manure – навоз

to mature – созревать

meat – мясо

mellow soil – рыхлая почва

milk – молоко

moisture – влага

nutrient – питательное вещество

nutritious – питательный

oats – овес

to obtain – получать

pasture – пастбище

perennial – многолетнее растение

to perform – выполнять

plant – растение

to plant – сажать

to plow – пахать

potatoes – картофель

poultry – домашняя птица

to produce – производить

proper – надлежащий

to provide – обеспечивать

quality – качество

radish – редис

rainfall – осадки

to raise – выращивать

rate – норма

to reduce – уменьшать, сокращать

to require – требовать

to roll – прикатывать (почву)

root – корень

root crop – корнеплод

rye – рожь

seed – семя

to seed – сеять

seedbed – пашня

sheep – овца, овцы

silage – силос

size – размер

soil – почва

soil fertility – почвенное плодородие

source – источник

spring crop – яровая культура

stand – всходы, травостой

stem – стебель

to store – хранить

sugar beet – сахарная свекла

sunlight – солнечный свет

to supply – снабжать

tap – стержневой (о корне)

tillage – обработка земли

tuber crops – клубнеплоды

to use – использовать

valuable – ценный

variety – сорт

warm – теплый

weed – сорняк

wheat – пшеница

winter crop – озимая культура

yield – урожай

БИБЛИОГРАФИЧЕСКИЙ СПИСОК

1. Толстой, С.С. Modern Agriculture / С. С. Толстой. – М.: Высш. шк., 1972.

2. Маслова, Г.В. Пособие для сельскохозяйственных техникумов / Г. В. Маслова. – М.: Высш. шк., 1991.

3. Митник, Л.А. Тексты на английском языке для студентов-заочников 2-го курса агрономического факультета / Л. А. Митник. – Москва, 1972.

4. Neil O’Sullivan, James D. Libbin. Agriculture / Express Publishing, 2009.

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