

МИНИСТЕРСТВО СЕЛЬСКОГО ХОЗЯЙСТВА
И ПРОДОВОЛЬСТВИЯ РЕСПУБЛИКИ БЕЛАРУСЬ

ГЛАВНОЕ УПРАВЛЕНИЕ ОБРАЗОВАНИЯ, НАУКИ И КАДРОВ

Учреждение образования
«БЕЛОРУССКАЯ ГОСУДАРСТВЕННАЯ
СЕЛЬСКОХОЗЯЙСТВЕННАЯ АКАДЕМИЯ»

Кафедра английского языка

О. С. Колыбенко, В. Л. Новицкая

АНГЛИЙСКИЙ ЯЗЫК

AGRONOMY

*Сборник текстов и упражнений на английском языке
для студентов всех специальностей
агрономического профиля*

2-е издание, дополненное и переработанное

Горки
БГСХА
2017

УДК 372.881.111.1, 811.541

*Рекомендовано методической комиссией
факультета международных связей
и довузовской подготовки.
Протокол № от декабря 2016 г.*

Авторы:
старший преподаватель *О. С. Колыбенко*,
преподаватель *В. Л. Новицкая*

Рецензент:
старший преподаватель *С. Л. Прокопенко*

Н

Новицкая, В. Л.

Английский язык. Агроному: сборник текстов и упражнений на английском языке / О. С. Колыбенко, В. Л. Новицкая. – 2-е изд., доп. и перераб. – Горки: БГСХА, 2017. – 51 с.

Приведены задания и упражнения по развитию разговорной речи на английском языке на основе текстов по агрономии.

Для студентов 1 курса всех специальностей агрономического профиля.

**УДК
ББК**

© УО «Белорусская государственная
сельскохозяйственная академия», 2017

ВВЕДЕНИЕ

Сборник текстов и упражнений предназначен для студентов агрономического факультета.

Цель сборника текстов и упражнений – научить читать, понимать и переводить литературу по специальности.

Сборник текстов и упражнений состоит из 11 уроков. В каждом уроке приведен словарный минимум, текст, предтекстовые и послетекстовые задания. Предтекстовые задания включают следующие упражнения: чтение интернациональной лексики и подбор соответствующих русских значений, соотнесение синонимов (антонимов), словосочетаний, подбор определений к словам и т. д. Уделяется внимание основным видам словообразования, переводу цепочек существительных и т. д. В упражнениях этого раздела включены и некоторые грамматические структуры, последовательность подачи которых диктовалась их естественным употреблением в отобранных текстах.

Послетекстовые упражнения направлены на закрепление лексики и проверку понимания прочитанного. Упражнения этого раздела базируются на лексике предтекстовых заданий и предшествующих уроков, что обеспечивает ее повторяемость. Примерами упражнений данного этапа служат такие задания, как «Приведите английские эквиваленты следующих слов и словосочетаний», «Заполните пропуски в предложениях словами из текста», «Ответьте на вопросы» и т. д.

В последнем упражнении каждого урока приведен небольшой по объему текст для перевода и пересказа.

Также сборник текстов и упражнений содержит тексты для внеаудиторного чтения.

Сборник текстов и упражнений может быть использован как для самостоятельной, так и для аудиторной работы.

UNIT 1

Упр. 1. Выучите следующие слова и словосочетания.

cereals – злаковые культуры
grasses – злаковые травы
wheat – пшеница
maize – кукуруза
rye – рожь
barley – ячмень
oats – овес
sorghum – сорго
millet – просо
to till the soil – обрабатывать почву
to cultivate – возделывать
weeds – сорняки
poor soil – неплодородная почва
hardy – морозоустойчивый
yield – урожай
seed – семена, зерно

Упр. 2. Переведите следующие слова без словаря.

Cultivation, history, civilization, primitive, form, original, Abyssinia, Europe, Nile, Egypt, Persia, Afghanistan, problem, climate, Arctic, story.

Упр. 3. Переведите следующие слова:

1) plant, to plant; 2) to cultivate, cultivation; 3) to till, tillage; 4) to begin; beginning; 5) to belong, belonging.

Упр. 4. Переведите «цепочки существительных».

Crop plants, grass family, cereal grains, seed grains, wheat crops, oat plant, soil condition, barley cultivation.

Упр. 5. Поставьте следующие прилагательные в форму сравнительной и превосходной степени. Переведите словосочетания, данные ниже.

Important, late, great, hardy, poor, cold.

1) The most important source of food, 2) the greatest number of varieties, 3) rice is hardier plant than wheat, 4) poorer soils, 5) colder climates.

Упр. 6. Переведите предложения, обращая внимание на значение слова «like».

1. The oat plant, like rye, is hardier than wheat.
2. I like ready-to-eat breakfast cereals.

Упр. 7. Поставьте глаголы в скобках в форму страдательного залога. Переведите предложения на русский язык.

1. Wheat, barley and millet (to be cultivated) in many countries.
2. The seed grains of wild grasses (to be gathered) by primitive men.
3. The original home of wheat and barley (to be forgotten).
4. Eighteen kinds of common barley (to be found) in Abyssinia.
5. Later barley (to be carried) down the Nile to Egypt.
6. In the early time of cultivation wheat (to be spread) over Europe.
7. Wheat, rye and oats (to be grown) in the temperate climate.

Упр. 8. Прочитайте и переведите текст.

Cereal Grains

The cereals are crop plants belonging to the grass family. The cereal grains are wheat, rice, maize, rye, barley, oats, sorghum and millet. They are the most important source of food for man and domestic animals. Cultivation of all the cereal grains except oats and rye began before the dawn of history. Wheat, barley and millet were cultivated in many parts of the Old World.

Long before the beginning of civilization the seed grain of wild grasses were gathered by primitive man and formed an important part of his food. Later, as man began to till the soil, cereal grasses were his first crops. The history of the cereals was the history of civilization.

Wheat and barley, oats and rye, all have been cultivated for so long in many lands that their original homes are forgotten. We know that the greatest number of varieties of a plant are found in its original home. Not less than eighteen kinds of the common barley are found in Abyssinia, about five in southern Europe and only one in Norway, at the northern limit of barley cultivation.

Abyssinia is the original home of barley. Later the barley was carried down the Nile to Egypt, in the early times of cultivation wheat was widely spread over Europe. Its original home lies in the great mountainous area of Persia and Afghanistan. How and when wheat arrived in Europe is an unsolved problem. One thing is certain, it did not come alone. Along with it came a number of weeds. Rye was one of them. It is a hardier plant than wheat and can grow on poorer soils and in colder climates.

The cultivation of rye in Europe extends to the Arctic circle. The story of oats has much in common with the story of rye. Many kinds of oats trav-

eled as weeds in the wheat-crops. The oat plant, like rye, is hardier than wheat.

Soil and climatic conditions are very important for growth, yield and quality of cereals. Wheat, maize, rye, barley, oats, sorhum and some of the millets are generally grown in the temperate climates.

Упр. 8. Переведите на английский язык:

зерновые культуры, пшеница, рис, кукуруза, овес, ячмень, просо, домашние животные, обрабатывать почву, сорняки, морозоустойчивая культура, неплодородные почвы, рост, урожайность, умеренный климат.

Упр. 9. Заполните пропуски в предложениях словами, данными под чертой.

1. The cereals belong to the ____ .
2. Cereal grains are ____ for man and domestic animals.
3. ____ were gathered by primitive men.
4. Rice can grow on ____ .
5. Oats traveled as ____ in wheat crops.
6. ____ are very important for growth, ____ and quality of cereals.

Seed grains of wild grasses, yield, grass family, poorer soils, weeds, soil and climatic conditions, the most important source of food.

Упр. 10. Соответствуют или не соответствуют тексту следующие утверждения?

1. The cereals include wheat, rice, rye, oats, pulse crop and millet. 2. Cultivation of oats and rice began long before. 3. Cereal grasses were the first food crops for primitive men. 4. Egypt is the original home of barley. 5. Wheat was widely spread over Europe. 6. Rye was one of the weeds in the early times of cultivation. 7. Soil conditions are very important for growth, yield and quality of cereals. 8. Cereal grains are generally grown in the colder climates.

Упр. 11. Ответьте на вопросы.

1. What family do cereal crops belong to? 2. Name cereal grains. 3. When did the cultivation of cereals begin? 4. Where is the original home of barley? 5. Where is the original home of wheat? 6. How and when did wheat arrive in Europe? 7. What is important for growth, yield and quality of cereals? 8. Where are cereals generally grown?

Упр. 12. Прочитайте текст без словаря и перескажите его.

Nutritional facts about cereals

Some grains are deficient in the essential amino acid lysine. That is why many vegetarian cultures, in order to get a balanced diet, combine their diet of grains with legumes. Many legumes, on the other hand, are deficient in the essential amino acid methionine, which grains contain. Thus, a combination of legumes with grains forms a well-balanced diet for vegetarians. Common examples of such combinations are dal (lentils) with rice by South Indians and Bengalis, dal with wheat in Pakistan and North India, and beans with corn tortillas, tofu with rice, and peanut butter with wheat bread (as sandwiches) in several other cultures, including Americans. The amount of crude protein found in grain is measured as the grain crude protein concentration.

UNIT 2

Упр. 1. Выучите следующие слова и выражения.

by the accidental hybridization – в результате случайной гибридизации

to introduce – вводить, ввозить

starchy and nitrogenous food material – питательные вещества, содержащие крахмал и азот

in close contact with – окруженный

ample store – обильный запас

embryo – (бот.) завязь

artificial cross fertilization – искусственное перекрестное опыление

thick-walled – толстостенный

straw – стебель, солома

resistant to lodging – устойчивый к полеганию

hardiness – морозоустойчивость

deep-rooted – с глубоким корнем

drought – засуха

loam – суглинок

peaty soils – торфяные почвы

luxuriant – буйный, пышный

Упр. 2. Переведите слова без словаря:

prehistoric, Persians, Greeks, Egyptians, hybridization, embryo, materi-

al, practically, produce, variety, selection, types, criterion, vegetation.

Упр. 3. Переведите «цепочки существительных».

Embryo plant, food material, yielding capacity, winter hardiness, winter varieties, spring and winter wheat, winter frost.

Упр. 4. Какие слова из колонки Б могут служить определениями к словам из колонки А? Переведите словосочетания.

А

grass

soil

yield

crops

straw

variety

Б

green, old, young, rich

poor, peaty, light, heavy

average, light, great

different, food, grain

thick-walled, luxuriant, short

winter, even, hardy

Упр. 5. Поставьте прилагательное в скобках в нужную степень сравнения. Переведите предложения.

1. (Important) criterion is yielding capacity of wheat. 2. Wheat gives (good) results in dry and sunny seasons. 3. Wheat is (resistant) to winter frost than barley. 4. When grown on peaty soils, the quality of wheat is (poor), while the vegetation is luxuriant.

Упр. 6. Поставьте глаголы в скобках в форму страдательного залога. Переведите предложения.

1. The cultivation of wheat (to begin) in prehistoric times. 2. This cereal (to value) by ancient people. 3. Wheat (to introduce) to Britain about 2400 B. C. 4. When wheat (to grow) on peaty soil the quality is poor.

Упр. 7. Прочитайте и переведите текст.

Wheat

The cultivation of wheat was begun in prehistoric times and the cereal was greatly valued by the ancient Persians, Greeks and Egyptians. Cultivated wheat originated by the accidental hybridization of certain species of wild grasses. Wheat was introduced to Britain about 2400 B.C.

Each grain of wheat consists of an embryo plant in close contact with an ample store of starchy and nitrogenous food material, the whole being surrounded by a coat.

Wheat, in common with many other species of cereals, is practically always self-fertilized. The great majority of wheats have been produced by artificial cross-fertilization of pre-existing distinct varieties, with selection

of the best types.

The first and most important criterion is yielding capacity. Thick-walled and short straw is highly resistant to lodging, which is of prime importance under conditions of high fertility. Winter hardiness is of great importance in the winter varieties. There are many different varieties of spring and winter wheat.

Wheat is extremely deep rooted and drought resisting, and on all except very light soils gives the best yields in dry and sunny seasons; it is also more resistant to winter frost than either barley or oats.

Perfect crops of wheat can be grown on heavy loams and clays. Satisfactory crops can be grown on light land in good condition. When wheat is grown on peaty soils the quality is usually poor, while the vegetation is luxuriant and the yield of straw is very large.

Упр. 8. Переведите словосочетания на русский язык.

Prehistoric times, cultivated wheat, accidental hybridization, certain species, wild grasses, distinct varieties, thick-walled and short straw, high fertility, light soils, perfect crops, heavy loams, satisfactory crops, light land, peaty soils, luxuriant vegetation.

Упр. 9. Дополните предложения недостающей информацией.

1. Cultivated wheat originated by ____ .
2. Each grain of wheat consists of ____ .
3. The most important criterion is ____ .
4. ____ is important in winter varieties.
5. Wheat is self- ____ .
6. Wheat is more resistant to winter frost than ____ .
7. Perfect crops of wheat can be grown on ____ .
8. ____ can be grown on light land.

Упр.10. Ответьте на вопросы.

1. When was the cultivation of wheat begun? 2. When was wheat introduced to Britain? 3. What does each grain of wheat consist of? 4. Is wheat self-fertilized? 5. What is the first and most important criterion? 6. What straw is highly resistant to lodging? 7. On what soils does wheat give the best yields? 8. What crop is more resistant to winter frost: wheat, barley or oats? 9. On what soils can perfect crops of wheat be grown?

Упр. 11. Прочитайте текст и перескажите его.

National food from wheat

Vereshchaka became common in the Grand Duchy of Lithuania in the mid-18th century. It is made from buckwheat flour, wheat flour, salt, sugar, eggs and milk. At first it was known as one of the variations of machanka – a meat sauce for pancakes. Vereshchaka was invented by royal chef called Vereshchaka. The dish became widely known in the 19th century, because its name coincided with the family name of Maryla Wereszczakowna, Adam Mickiewicz's biggest love. Vereshchaka is one of the hallmarks of Belarusian cuisine. The recipe has many regional and individual variations.

UNIT 3

Упр. 1. Выучите следующие слова и словосочетания.

its cultivation is confined to districts – ее возделывание ограничено районами

inferior – худший

to succeed – (зд.) давать хороший урожай

fen – болото

forage – корм

seed-bed – пашня

broadcast – разбрасывать (семена)

drill – высаживать, сеять рядами

seed – посев

sowing – посев, засевание

before the ear has filled – до наливания колоса

threshing process – молотьба

stem – стебель

before it shoots – до выхода в трубку

unpalatable – невкусный, неприятный на вкус

Упр. 2. Подберите к выделенным существительным подходящие прилагательные. Переведите словосочетания на русский язык.

plant

drought resistant

productive

green

soil

good

peaty

light

land

poor

dry

light

rye

hard

dry

unpalatable

Упр. 3. Переведите «цепочки существительных».

Acid conditions, forage purposes, wheat sowing, rye straw, threshing process, forage crop, growing period.

Упр. 4. Переведите прилагательные в скобках и прочитайте предложения.

1. When rye is grown for grain on good soil it is (менее) profitable than other cereals. 2. Rye does (лучше всего) on good loams which yield (больше) profit under other crops. 3. Rye is (более) winter hardy than wheat.

Упр. 5. Переведите предложение, обращая внимание на перевод союза *either ... or ...* – или ... или

The grain of rye may either be broadcast or drilled in the usual way.

Упр. 6. Заполните пропуски необходимыми модальными глаголами и переведите предложения.

may – можно, может

should – следует

must – должен

1. Seeding ____ take place before wheat sowing. 2. When rye is grown for special purposes, it ____ be cut before the ear has filled. 3. When rye is grown as a forage crop, it ____ be cut early.

Упр. 7. Соотнесите антонимы.

- | | |
|-----------|----------|
| 1) dry | a) heavy |
| 2) good | b) less |
| 3) light | c) after |
| 4) more | d) poor |
| 5) before | e) late |
| 6) early | f) wet |

Упр. 8. Прочитайте и переведите текст.

Rye

Rye is a drought resistant plant which thrives under a great variety of conditions; it is productive upon almost any class of soil and very resistant to acid conditions. When rye is grown for grain on good soil it is usually less profitable than the other cereals, and its cultivation is therefore confined to districts of poor, dry, light land that produce inferior wheat and oats. It also succeeds on peaty soils and on the poorer sorts of black fen. Rye does best on good loams, which however, yield more profit under other crops. Rye is considerably more winter-hardy than wheat. When rye is grown on good land it is mostly cultivated for forage purposes.

The seed-bed is prepared as for wheat, and the grain may either be broadcast or drilled in the usual way. Seeding should take place from two to three weeks before wheat sowing begins.

Cutting takes place about the beginning of August. When high-quality rye straw is required for special purposes it may be cut before the ear has filled then dried and used: this avoids the threshing process which damages the stems considerably. Where it is grown as a forage crop, it must be cut early before it shoots as towards the end of its growing period it becomes hard, dry, and unpalatable.

In Britain rye is cultivated as a forage crop, but more largely for its grain and straw.

Упр. 9. Определите, соответствуют или не соответствуют тексту следующие утверждения.

1. Rye is a drought resistant plant, but it is not resistant to acid conditions.
2. Rye is usually less profitable than the other cereals.
3. Rye succeeds on peaty soils.
4. Rye does best on good loams.
5. Rye is considerably more winter-hardy than wheat.
6. Seeding should take place before wheat sowing begins.
7. Cutting takes place about the beginning of July.
8. In Britain rye is cultivated as a forage crop.

Упр. 10. Заполните пропуски в предложениях словами, данными под чертой.

1. Rye grows on any kind of ____ and is very resistant to ____ .
2. When rye is grown for ____ it is less profitable than the ____ .
3. Rye is more ____ than wheat.
4. The ____ is prepared as for wheat.
5. When rye is grown as a ____ it must be cut early.
6. In Britain rye is mostly cultivated for its ____ .

Grain, winter hardy, grain and straw, acid conditions, soil, other cereals, seed-bed, forage crop.

Упр. 11. Ответьте на вопросы.

1. Under what conditions does the rye thrive?
2. What soils is rye productive upon?
3. How is the seed-bed prepared?
4. When should seeding take place?
5. When does cutting take place?
6. What is rye cultivated for?

Упр. 12. Прочитайте текст без словаря и расскажите, как используется рожь.

Tips for Preparing Rye

Like all grains, before cooking whole rye berries, rinse them thoroughly under running water and then remove any dirt or debris that you may find. After rinsing, add one part whole rye to two and one-half parts boiling water along with a pinch of salt. After the liquid has returned to a boil, turn down the heat, cover and simmer for about 1 to 1-1/2 hours. If you want the texture to be softer, you can soak the rye grains overnight and then cook them for two to three hours. To cook rye flakes, use about three parts water for each part rye flakes and cook for about 30 minutes.

UNIT 4

Упр. 1. Выучите следующие слова и словосочетания.

varieties in cultivation – выращиваемые сорта

abundant – обильный

respond to liberal manuring – реагирует на обильное удобрение

to treat (зд.) – удобрять

dressing – удобрение

kainit – каинит

to be in high condition – находиться в очень хорошем состоянии

to ripen – созреть

watertable – уровень грунтовых вод

clay loam – иловатый суглинок

1 to 3 cwt (hundred weight) – от 1-го до 3-х английских центнеров
(1 cwt = 50,8 кг)

Упр. 2. Переведите «цепочки существительных»

Winter cold, oat varieties, soil and climate conditions, winter varieties, seed-time, summer temperature, feeding value, clay loam.

Упр. 3. Переведите следующие словосочетания, обращая внимание на степени сравнения прилагательных.

The most extensively cultivated cereal, much more successful crop, poorest soil, the most fertile soil, the best of the cultivated cereals, lower rainfall, better soil, better grain, less straw, lower feeding value, the best soil.

Упр. 4. Соотнесите антонимы.

- | | |
|------------|---------------------|
| 1) low | a) dry |
| 2) wet | b) early |
| 3) poorest | c) the most fertile |
| 4) late | d) less |
| 5) more | e) after |
| 6) before | f) high |

Упр. 5. Соотнесите синонимы.

- | | |
|----------------|------------------|
| 1) rainfall | a) dressing |
| 2) distinction | b) fine |
| 3) manuring | c) infertile |
| 4) good | d) precipitation |
| 5) poor | e) difference |

Упр. 6. Прочитайте и переведите текст.

Oats

The oat is the most extensively cultivated cereal in Britain, and is grown in every country and under widely different conditions of soil and climate. While not as resistant to winter cold as wheat and barley, oats are much more successful than these cereals in wet districts.

The number of oat varieties in cultivation is very large, and since the crop is grown under a very wide range of soil and climate conditions, from the poorest to the most fertile soils, and under annual rainfalls of 20 to perhaps 70 in., it will be obvious that a wide choice of types is desirable. There is a fairly sharp distinction between true winter varieties (which are normally sown in October and are usually ripe for harvest before the end of July) and the spring varieties, for which seed-time ranges from late February to the middle of April and which ripen from early August to late September, or even as late as October in the extreme north. The oat is the best of the commonly cultivated cereals for growing on poor soil, in dull rainy districts and where the summer temperature is rather low; it can be ripened by a minimum of sunshine. Very high rainfall encourages the development of straw rather than grain. Lower rainfall and better soil lead to the development of more and better grain but less straw of lower feeding value.

In the fens the rainfall is low; very fine crops of oats can be grown because the soil receives a constant supply of moisture from the high water-table. A clay loam that is supplied with abundant moisture is the best soil for this crop, but black-top and peaty lands give almost as good results.

Manuring. While the oat crop is capable of producing a fair yield on very poor soil, it nevertheless responds to liberal manuring, and it is common to treat it with nitrogenous, phosphatic, and under certain circumstances, potassic dressing. A common treatment is to give 1 to 3 cwt. of superphosphate according to local conditions, up to 2 cwt. of sulphate of ammonia at seed-time and if the soil is light, an addition of 2 cwt. of kainit applied a month or so before sowing. On good soils that are in high condition, first-class crops of oats can be grown without the application of any manure.

Упр. 7. Дайте английские эквиваленты следующих слов и словосочетаний.

Овес не так устойчив к зимнему холоду, как пшеница и ячмень, расти гораздо лучше этих злаковых в районах с влажным климатом, выращиваемые сорта, в самых разнообразных условиях, реагирует на обильное удобрение, за месяц или около этого до посева, находиться в очень хорошем состоянии, вызревать, бедная неплодородная почва, низкая температура летом, обильные осадки, постоянный запас влаги, высокий уровень грунтовых вод, иловатый суглинок.

Упр. 8. Заполните пропуски в предложениях словами, данными под чертой.

1. Oats are not ____ to winter cold as wheat and barley.
2. Oats are more successful than some cereals in ____ .
3. The number of oat _____ is very large.
4. The oat is the best of the commonly cultivated cereals for ____ .
5. _____ encourages the development of straw.
6. A ____ is the best soil for crop.
7. Oat crop can produce fair yield on ____ .
8. Oat responds to ____ .
9. On good soils that are in high condition, fine crops of oats can be grown without the ____ .

Wet districts, varieties, high rainfall, growing on poor soil, clay loam, moisture, application of any manure, resistant, very poor soil, liberal manuring.

Упр. 9. Ответьте на вопросы.

1. What soil can oats be grown on?
2. What climatic conditions does the crop require?
3. What distinction is there between winter and spring varieties?
4. Does very high rainfall encourage the development of straw or grain?
5. What do lower rainfall and better soil lead to?
6. What crops of oats can be grown in the fen?
7. What is the best soil for oats?
8. Do oats respond to manuring?
9. What dressing is it common to treat oat with?

10. What is a common treatment? 11. Where can first-class crops of oats be grown without application of any manure?

Упр. 10. Заполните пропуски в тексте словами, необходимыми по смыслу, и перескажите его.

Oats are an important g... crop. F... grow them to feed livestock, but oats also provide food for many people. Oats are a cereal grain and belong to the same family of plants as w..., r..., m... and b... . Oats have a higher food value than any other c... grain. They are rich in starch, protein, v... B. Various diseases sometimes attack oats and reduce the y... . Some farmers use chemical sprays to control d... and insects. But the best protection comes from planting resistant v... of oats. Researches continually develop new varieties that are more r... to diseases and i... . The new varieties also produce higher yields and better grain.

Упр. 11. Прочитайте текст и перескажите его.

Oatmeal

Many foods fall in and out of favor as health trends come and go. Not oatmeal. This whole-grain powerhouse has been packing serious nutrition and hearty flavor into breakfast for generations. It's one of the few comfort foods that are as good for you as they are just plain good. Great oatmeal starts with plain rolled oats, or steel-cut oats, cooked in a little water or milk, and topped with wholesome ingredients. It's a feel-good start to the day, and if you make it a habit, it can do your health some favors.

UNIT 5

Упр. 1. Выучите следующие слова и словосочетания.

malting – солодоращение

suitability – годность

by-product – побочный продукт

rolling – прикатывание (каткование) почвы

harrowing – боронование

artificial fertilizers – искусственные удобрения

ripening – вызревание

to endanger – подвергать опасности

potash – углекислый калий

to supply – вносить

smut – головня, ржавчина (болезни растений)

leaf-stripe – красно-бурая гельминтоспориозная пятнистость
gout-fly – зеленоглазка (зеленоглазая муха)
the only cause of failure being soil acidity – единственной причиной
неурожая является кислотность почвы
barley suffers from fungoid diseases – ячмень подвержен грибковым
заболеваниям
insect pests – насекомые-вредители

Упр. 2. Переведите «цепочки существительных».

Bread cereal, soil acidity, malting purposes, root crop, insect pests.

Упр. 3. Укажите слово, выпадающее по значению из ряда.

Barley, cabbage, oats, wheat.

Fungoid diseases, smut, leaf-stripe, gout-fly.

Soil, land, manure, ground.

Potash, nitrogen, superphosphate, manure.

Fertile, poor, rich, good.

Упр. 4. Переведите модальные глаголы в скобках на английский язык. Переведите предложения на русский язык.

1. Seed-bed (следует) be prepared.

2. In late season crops (могут) be obtained from the seed put in May.

3. Late ripening (может) endanger the quality of the crop.

Упр. 5. Поставьте прилагательные в скобках в нужную степень сравнения. Переведите предложения на русский язык.

1. Barley does (good) on a moderately deep seed-bed.

2. Barley has a (short) period of growth than the other cereals.

3. In a late season crops can be obtained from the seed put in as (late) as May.

Упр. 6. Прочитайте и переведите текст.

Barley

Barley is derived from wild grasses native to northern Africa and western Asia. It is widely grown in all subtropical and temperate countries, and large areas are devoted to its cultivation in many parts of the British Isles. It is used for human food and is an important bread cereal in some parts of Europe. Barley is also used for malting, and its degree of suitability for this purpose determines the marked value of the crop, the straw being strictly a by-product. Barley can be grown under almost any conditions of soil and climate, the only cause of failure being soil acidity; but all conditions do not give equally-good barley for malting purposes. Barley does best on a very

fine and moderately deep seed-bed, and this should be prepared by harrowing and rolling.

Barley has a shorter period of growth than the other cereals, and in a late season crops can be obtained from seed put in as late as May.

When barley is grown on land in high condition, or on land where a root crop has been consumed, it is not a rule necessary to supply any artificial fertilizers; but under conditions where the land is so rich that luxuriant vegetation and late ripening may endanger the quality of the crop, it may be desirable to apply 2 or even 3 cwt. of superphosphate per acre and to balance this with an appropriate amount of barley suffers from fungoid diseases, such as smut and leaf-stripe. It also is greatly damaged by insect pests (gout-fly).

Упр. 7. Составьте словосочетания и переведите их на русский язык.

- | | |
|----------------|----------------|
| 1) wild | a) areas |
| 2) subtropical | b) ripening |
| 3) large | c) grasses |
| 4) human | d) seed-bed |
| 5) deep | e) vegetation |
| 6) late | f) diseases |
| 7) artificial | g) countries |
| 8) luxuriant | h) fertilizers |
| 9) fungoid | t) food |

Упр. 8. Переведите на английский язык.

Ячмень происходит от диких злаковых растений; единственная причина неурожая, кислотность почвы, лучше всего расти; буйная вегетативная масса; ячмень подвержен грибковым заболеваниям; выращивание ячменя; на любых почвах, прикатывание почвы; семена; корнеплоды, вносить удобрения, вредители; солодоращение; солома является побочным продуктом.

Упр. 9. Исправьте следующие утверждения.

1. Barley is used only for melting purposes.
2. Barley does best on acid soils.
3. Barley has a longer period of growth than the other cereals.
4. When barley is grown on land in high condition it is necessary to apply artificial fertilizers.
5. Insect pests don't attack barley.
6. Diseases may not reduce the yield and the quality of barley.

Упр. 10. Ответьте на вопросы.

1. Where (in what countries) is barley usually grown? 2. What is barley used for? 3. What soils can barley be grown on? 4. What is the only frequent cause of failure? 5. How should seed-bed be prepared? 6. Is it necessary to apply artificial fertilizers? 7. What diseases does barley suffer from? 8. What may endanger the crop? 9. What insect pests can attack barley?

Упр. 11. Дополните текст недостающими словами.

Barley is an important It belongs to the same family of plants as maize, ... , rice and Farmers grow barley for ... and for feeding to livestock. Winter barley is planted in the ... and harvested the following summer. ... barley is planted in the spring and becomes mature by the summer. ... is usually harvested with combine Annual world barley ... totals about 180 million tons. Belgium, France, Ireland and Switzerland usually have the highest

Упр. 11. Прочитайте и перескажите текст.

Barley is a major cereal grain, commonly found in bread, beverages, and various cuisines of every culture. It was one of the first cultivated grains in history and, to this day, remains one of the most widely consumed grains, globally. Barley and other whole grain foods have rapidly been gaining popularity over the past few years due to the various health benefits they provide. Whole grains are important sources of dietary fiber, vitamins, and minerals that are not found in refined or "enriched" grains. When refined, grains lose certain components (specifically, the bran and germ), which also removes most of the fiber and nutrients naturally found in most grains. Choosing whole grains over their processed counterparts reduces the risk of several chronic diseases such as obesity, diabetes, heart disease, and cancer.

UNIT 6

Упр. 1. Выучите следующие слова и словосочетания.

maize – кукуруза

to spread – распространяться

maturity – спелость, вызревание

minor forage crop – второстепенная культура

earliness – скороспелость

clay – глина

manure – компост, удобрение, удобрять

muriate – солянокислая соль

bushel – бушель (мера емкости 36,3 л)

germination – прорастание
at the rate of – при норме посева
to rot – гнить
to suppress – подавлять
singling – пикировка (растений), прореживание
shading – затенение

Упр. 2. Переведите «цепочки существительных».

Table purposes, forage crop, farmyard manure, crop plants, row-crop cultivation, fodder crops.

Упр. 3. Переведите прилагательные в скобках на английский язык. Переведите предложения на русский язык.

1. In Britain even (самые ранние) varieties have been found to ripen seed only in the (более теплые) years and in the (самые солнечные) and (самые жаркие) districts but continuous progress in the direction of (более раннее) maturity is being made in the USA.

2. The minimum temperature of germination of the seed is (выше) than for the general British crops.

3. Maize grows (лучше всего) on warm fertile loams.

Упр. 4. Переведите слова, обращая внимание на префиксы и суффиксы:

1) deep, depth, to deepen, deeper; 2) warm, warmth, to warm, warmer;
3) to grow, grown, growth; 4) sow, sowing; sown; 5) harrow, to harrow, harrowing; 6) to roll, rolling.

Упр. 5. Составьте словосочетания и переведите их.

early	maturity, variety, cultivation
late	summer, variety, seed
deep	seed-bed, soil, yield
warm	loams, soil, germination
rapid	germination, rotation, cultivation

Упр. 6. Соотнесите антонимы.

1) rapidly	a) maximum
2) minimum	b) warmA
3) higher	c) small
4) cold	d) slowly
5) large	e) lower

Упр. 7. Прочитайте и переведите текст.

Maize

Maize originated in America and very soon after the discovery of the New World spread very widely throughout Africa, southern Europe, and

southern Asia. In Britain even the earliest varieties have been found to ripen seed only in the warmer years and in the sunniest and hottest districts but continuous progress in the direction of earlier maturity is being made in the northern United States and Canada, and new strains are being tested in the south of England.

The sweet varieties are grown on a small scale for table purposes and some of these can produce ripe seed in the south-east of England.

In Britain maize is one of the minor forage crops for use in the late summer.

Maize grows best on warm, fertile loams, but when well manured it produces good crops on light soils, provided that these are of fair depth. Light soils have the advantage of warmth and earliness; on clays it often fails to reach best stage of maturity.

The crop is generally grown on land that has received good dressing of farmyard manure and at seed-time it is given about 2 cwt. of sulphate of ammonia, 3 cwt. of superphosphate, and 1 cwt. of muriate of potash per acre. A deep seed-bed is prepared by harrowing, rolling and cultivating, and in mid May the seed is drilled in rows from 18 to 24 in. apart, at depth of about 2 1/2 in., and at the rate of about a bushel per acre.

The minimum temperature for germination of the seed is higher than that required for the general British crop plants, and if sown in cold soil the seed will rot.

After sowing, the crop is harrowed to suppress weeds. If sown thinly there is no need for singling. The maize grows rapidly and a good crop soon checks weeds by shading.

The advantage of the crop over barley is its larger yield and its adaptability to row-crop cultivation – it may replace fodder roots in the rotation.

Упр. 7. Переведите на английский язык.

Второстепенная кормовая культура; скороспелость; во время сева в почву; при норме высева; более раннее созревание; сладкие сорта; теплый плодородный суглинок; хороший урожай; глубина почвы; скороспелость; время сева; минимальная температура прорастания семян; гнить; подавлять сорняки; корнеплоды.

Упр. 8. Вставьте слова, данные под чертой, и переведите предложения.

1. Maize ____ in America.
2. ____ are grown for table purposes.
3. Maize grows best on ____ .
4. ____ soils have the advantage of warmth and ____ .

5. Maize often fails to reach the best stage of ____ on.
6. A deep seed-bed is prepared by ____ , ____ and ____ .
7. If maize is sown in cold soil the seed will ____ .
8. After sowing maize is harrowed to suppress ____ .
9. Maize ____ may replace fodder roots in the ____.

Originated, fertile loams, maturity, light, harrowing, rot, weeds, cultivating, sweet varieties, earliness, clays, rolling, rotation.

Упр. 9. Ответьте на вопросы.

1. Where did maize originate? 2. What purpose is maize grown for?
3. On what soils does maize grow best? 4. What advantage do light soils have? 5. How is seed-bed prepared? 6. What is the minimum temperature for germination? 7. What will happen to the seed if it is sown in cold soil? 8. Why is the crop harrowed after sowing? 9. What advantage over barley does maize have?

Упр. 10. Прочитайте текст без словаря и перескажите его.

Maize is a cereal grass related to wheat, rice, oats and barley. Maize was first used for food about 10 000 years ago by Indians. Maize is a plant whose food value and wide variety of uses make it one of the most important crops in the world. Depending on the variety maize can be grown in most mild and tropical regions of the world. The USA is the world's leading producer and exporter of maize. It produces about two fifths of the world's supply. Other major maize producers include Brazil, China, Romania, Ukraine, and Yugoslavia.

UNIT 7

Упр. 1. Выучите следующие слова и словосочетания.

- pulse crops – бобовые культуры
- beans – бобы
- arable districts – земледельческие районы
- stiff clay soils – грубые глинистые почвы (глиноземы)
- chalky boulder clay – известковая валунная глина
- lime – известь
- to drain – осушать
- the yield of grain is often disappointing – урожай зерна часто вызывает разочарование
- clover – клевер
- legumes – бобовые (растения)
- peas – горох

digestible protein – легкоусвояемый белок
 low fibre content – низкое содержание волокон
 soiling – зеленая подкормка
 ensilage – силосование, силос
 hay – сено
 dwarf garden sorts – карликовые садовые сорта
 pod – стручок
 to thresh – молотить
 to process – перерабатывать
 calcareous loam – известковый суглинок
 sandy – песчаный

Упр. 2. Переведите «цепочки существительных».

Clay soils, boulder clay, soil reserves, fibre content, grain crop, dwarf garden sorts, early picking crops, pea soil.

Упр. 3. Определите, какие слова из колонки А могут служить определениями к словам из колонки Б. Переведите словосочетания.

А	Б
soil	suitable, clay, sandy, gravelly
yield	disappointing, average, high, harmful
plant	ancient, useful, green, cold
crops	grain, pulse, essential, forage

Упр. 4. Заполните таблицу словами, данным ниже.

plants	types of soil	artificial fertilizers

Beans, clay soils, chalky boulder clay, clover, nitrogen, peas, oats, calcareous loam, dry sandy soil, gravelly land, potash, phosphate.

Упр. 5. Переведите следующие словосочетания с причастием II по образцу:

grown crop – выращенная культура
 Cultivated plants, well-drained land, mixed crop, threshed dried peas, marked deficiency.

Упр. 6. Переведите следующие предложения, используя образцы:

Some plants may be grown on any soil. – Некоторые растения можно вырастить на любой почве.

1. Peas may be grown in mixture with oats. 2. The mixed crop may be cut green. 3. Dwarf garden sorts may be grown in the field. 4. The crop may

be sown. 5. The crop may be ripened and threshed. 6. Peas may be cleaned and stored, 7. Peas may be processed and canned.

Упр. 7. Переведите предложение на русский язык по следующему образцу (глагол в Present Perfect переводите глаголом в прошедшем времени).

We have read about famous agronomists. – Мы читали (прочитали) о знаменитых агрономах.

Experiments have shown that (he crop responds to potash and to phosphate.

Упр. 8. Прочитайте и переведите текст.

Pulse crops

Beans. The common bean is one of the most ancient of cultivated plants.

Beans are grown to a greater or less extent in most of the arable districts of Britain, but they give best results when grown on stiff clay soils, and may even fail on the lighter portions of a field. Probably the very best soils are the chalky boulder clays, as the bean does best where there is plenty of lime; but the crop will not thrive unless the land be well drained. On land rich in humus, the yield of grain is often disappointing though the weight of straw may be very great.

Beans may take the place of clover in a rotation, as, being legumes, they tend to increase the soil reserves of nitrogen.

Peas. Peas are very similar in composition to beans, i.e. they contain nearly 20 per cent of digestible protein and have a low fibre content. When intended for animal food, peas may be grown either pure or in mixture with oats, and the mixed crop may be either treated as a grain crop or cut green for soiling, ensilage, or hay. Peas grown for human food are dealt with in three different ways. Firstly, any of the dwarf garden sorts can be grown in the field and be picked for market when the pods are still green and the seed still soft. Secondly, the crop may be sown and the whole material sent to a factory, either to be canned or to be preserved by "quick freezing". Thirdly, the crop may be ripened and threshed. The threshed dried peas may be cleaned, stored, and put up in packets for sale or they may be processed in order to soften them and then canned. The best pea soil is a medium calcareous loam, but dry sand or gravelly land is required for the production of early picking crops.

Experiments have shown that the crop responds markedly to potash, and to phosphate only when the soil shows a marked deficiency.

Упр. 9. Переведите на английский язык слова в скобках и прочитайте предложения.

1. Beans are grown in most of the (земледельческие районы) of Britain. 2. The best soil for beans is (известковая валунная глина). 3. (На землях богатых гумусом) the yield of grain is often disappointing. 4. Beans may take place of clover (в севоо бороте). 5. Peas contain nearly 20 percent of (легко усваиваемый белок). 6. Peas have (низкое содержание волокон). 7. The best pea soil is (известковый суглинок).

Упр. 10. Заполните пропуски словами из текста.

1. Legumes increase the soil reserves of _____. 2. Peas may be cut green for _____. 3. Peas can be picked for market the _____ are green. 4. Gravelly land is required for _____ crops. 5. Bean does best where there is a plenty of _____. 6. On land rich in _____ the yield of _____ is low, but the weight of _____ may be green.

Упр. 11. Ответьте на вопросы.

1. On what soils must beans be grown? 2. What are the best soils for growing beans? 3. Are peas similar in composition to beans? 4. What are peas grown for? 5. What is the best pea soil? 6. When do peas respond most markedly to potash and to phosphate?

Упр. 12. Прочитайте текст без словаря и ответьте на вопрос: «Why are beans among the most important vegetables grown on the farm and in many home gardens?»

Many kinds of beans are cultivated throughout the world. Certain kinds of beans are among the most nourishing vegetables eaten by human beings. Cooked beans are popular food. Other kinds of greens provide valuable green fodder for cattle or yield the raw material for many kinds of manufactured articles. Another useful quality of beans is (their power to enrich the soil with nitrogen that their bacteria take from the air. That's why farmers use legumes to improve the quality of the soil.

UNIT 8

Упр. 1. Выучите следующие слова и словосочетания.

root crops – корнеплоды

sugar beet – сахарная свекла

biennial plant – двухлетнее растение

red beet – красная свекла

high dry matter content – высокий процент содержания сухого вещества

tops – ботва
 pulp – жом (мякоть)
 tops are ploughed in as manure – ботву запахивают как удобрение
 stony soils cause the roots to fork – на каменистых почвах свекла становится вилчатой (имеет форму вилки)
 liming – известкование
 with regard to – что касается
 subsoiling – подпочвенная вспашка
 furrow – борозда
 to secure – (зд.) достигать
 consolidating the surface soil with rollers – уплотнение верхнего слоя почвы катками
 average land – умеренно плодородная почва

Упр. 2. Переведите «цепочки существительных».

Sugar beet, dry-matter content, sugar content, sugar beet cultivation, furrow slices, winter frosts, moisture supply, surface soil, insect pests.

Упр. 3. Заполните таблицу словами, данными ниже.

Soil types	Tillage operations	Root crops

Sugar beet, ploughing, deep loam, red beet, stony soils, light land, radish, peaty soil, subsoiling, rolling, cultivation, harrowing.

Упр. 4. Поставьте прилагательные в скобках в нужную степень сравнения и переведите предложения на русский язык.

1. The (good) soil for beet is a deep loam. 2. The (high) sugar content is obtained when the beet is grown on light land and the (low) on peaty soil. 3. The ploughing should be as (deep) as the nature of the soil will permit.

Упр. 5. Переведите предложения, обращая внимание на конструкцию модальный глагол + инфинитив в страдательном залоге.

1. Beet cannot be grown on land that requires liming. 2. Ploughing may be accompanied by subsoiling. 3. Ploughing should be done early. 4. The yield of the crop depends on the number of beets that can be grown to the acre.

Упр. 6. Прочитайте и переведите текст.

Sugar Beet

Sugar beet is a biennial plant closely related to the red beet. Sugar beets are white-coloured; their average weight is about 1 lb. They have high dry-matter content, their sugar content alone amounting to from 13 to more than

20 per cent of their weight,

Sugar beet cultivation has now extended to every country in Europe, to America, and to many other temperate countries throughout the world. Although the main object of growing beet is the production of sugar, the by-products, tops and pulp, are important to many growers, especially dairy farmers. In other cases the tops are ploughed in as manure.

The best soil for beet is a deep loam, but the crop has been grown quite satisfactorily on well-drained soils of practically all types.

Stony soils are unsatisfactory because they cause the roots to fork. Beet cannot be grown profitably on land that requires liming. With regard to quality it is found the highest sugar content is obtained when the beet is grown on light land and the lowest on peaty soil.

The ploughing should be as deep as the nature of the soil will permit, and in some cases it may be profitably accompanied by subsoiling. It should be done early so that the furrow slices get the benefit of long exposure to winter frosts. A full germination of the seed depends on an adequate moisture supply, and this is best secured by consolidating the surface soil with rollers both before and after sowing.

The yield of the crop depends very largely on the number of beets that can be grown to the acre.

Beet is attacked by a number of the fungoid diseases and insect pests, but their incidence is seldom serious unless the crop is grown for several years on the same land.

Упр. 7. Дайте английские эквиваленты.

Сахарная свекла; двухлетнее растение; высокий процент содержания сухого вещества; ботву запахивают как удобрение; из-за них свекла становится вилчатой (имеющая форму вилки); глубокий суглинок; большие предосторожности при хранении; ее (вспашку) можно успешно сочетать с подпочвенной вспашкой; требует известкования; уплотнение верхнего слоя почвы катками; на умеренно плодородной почве; если эту культуру не выращивать на одной и той же земле в течение нескольких лет; торфяная почва; полное прорастание семян; влага; до и после посева; урожай; грибковые заболевания, насекомые-вредители.

Упр. 8. Заполните пропуски в предложениях словами из текста.

1. Sugar beets are w... . 2. The average w... of a crop is about 1 lb. 3. Tops and pulp are important to many g... . 4. S... soils cause the roots to fork. 5. The p... should be deep. 6. A full g ... of the seed depends on an adequate m... supply. 7. The y... of crops depends on the number of beets

per acre. 8. Beet is attacked by f... diseases and i... . 9. The crop shouldn't be grown for several years on the same l... .

Упр. 9. Ответьте на вопросы.

1. Are sugar beet and red beet related? 2. What color are sugar beets? 3. What is the average weight of a crop? 4. What countries is sugar beet cultivated? 5. What is the main object of growing beet? 6. Why are tops and pulp also important? 7. What is the best soil for beet? 8. Why are stony soils unsatisfactory? 9. What soils is the highest sugar content obtained from? 10. Why should the ploughing be deep and early? 11. What does a full germination of the seed depend on? 12. What does the yield of the crop depend on? 13. Do insect pests attack beet? 14. When is their incidence rather serious?

Упр. 10. Заполните пропуски в тексте словами, данными под чертой. Перескажите текст.

Beet is a plant grown for _____. The ball-shaped roots of a variety called _____ are cooked as a vegetable. Another variety with light tan roots called _____ is a leading source of sugar. Both kinds are important _____. Beet is also used as livestock _____. Beets are an excellent source of calcium, iron and vitamin A. Sugar beets provide much of the sugar produced in many countries. They grow best in areas that have cool nights during the _____.

beetroot, food, commercial crops, fodder, sugar beet, beet leaves, growing season.

UNIT 9

Упр. 1. Запомните следующие слова и словосочетания.

small garden sorts – мелкие столовые сорта

white fleshed field carrot – крупные белые кормовые сорта

rich in carotene – богатый каротином

shallow land – неглубокая почва

stony – каменистый

slow-growing – тугорослые

they cannot compete with weeds – (зд.) сорняки заглушают их

to facilitate – облегчать

selective weed killer – гербицид

to produce a response – вызывать отдачу

main crop carrots – морковь основного урожая

hoe – мотыга; выпалывать

to single – прореживать

Упр. 2. Переведите «цепочки существительных».

Garden sorts, field carrots, field varieties, weed-killer, inter-row cultivation, sugar beet, main crop carrot, tractor-hoeing, hand-weeding, hoe-equipment, winter and early spring market, soil types, row width, tractor work.

Упр. 3. Определите, какие слова из колонки А могут служить определениями к словам из колонки Б. Переведите словосочетания.

А	Б
land	shallow, stony, heavy, light, clean
carrots	cultivated, wild, field, yellow, main crop
weed	annual, biennial, perennial, harmful, green
cultivation	large-scale, inter-row, green

Упр. 4. Определите, какой частью речи является выделенное слово. Переведите предложения на русский язык.

1. Our cultivated carrots originated from the wild carrot. Large-scale cultivation of carrots is restricted to two soil types. Field must be cultivated.
2. Farm crops grow best when there are no weeds in the field. Hand- weed-
ing is very laborous. I need to weed my flower-beds. 3. Some growers treat
the carrot in much the same way as sugar beet. Carrots cannot grow on shal-
low or stony land. Crops grown on heavy land are costly to harvest. The
seedlings of carrots are slow-growing.

Упр. 5. Сравните формы глаголов Present Indefinite (Active or Passive). Обратите внимание на способы перевода пассивных конструкций. Определите залог выделенных глаголов и переведите следующие предложения на русский язык.

Active	Passive
Farmers cultivate their fields.	Fields are cultivated by farmers.
Фермеры обрабатывают поля.	Поля обрабатываются фермерами.

1. Carrots grow well under all climatic conditions. White-fleshed carrots are grown for stock. 2. A selective weed-killer is used to deal with annuals. Some growers use for carrots the same fertilizers as for sugar beet. 3. Farmers usually sow 4 lb. of seed an acre. Maincrop carrots are sown in April or early May.

Упр. 6. Переведите предложения, обращая внимание на способы перевода модальных глаголов в пассивных конструкциях.

1. No attempt should be made to grow field varieties on stony land. 2. The importance of clean land for carrots can hardly be overestimated. 3. About 4 lb of seed is significant to sow an acre, if the plants are to be

singled. 4. In the mildest districts crops for the early market may be sown in February. 5. Hand-weeding is very laborious and every effort should be made to eliminate it.

Упр. 7. Прочитайте и переведите текст.

Carrots

Our cultivated carrots have been obtained from the wild carrot, which is a common annual or biennial weed by a process of selection. There are numerous varieties, varying from the small sweet garden sorts to the large white-fleshed field carrots which are grown exclusively for stock. The yellow varieties are very rich in carotene.

Carrots grow well under all climatic conditions, but for large-scale cultivation are almost restricted to two soil types – very deep, sandy loams and the light peats.

No attempt should be made to grow field varieties on shallow or stony land, as the crop is certain to be inferior and unprofitable. Crops grown on heavy land are very difficult and costly to harvest. The importance of clean land for carrots can hardly be overestimated, as the seedlings are so slow-growing and delicate that they cannot compete with weeds. About 4 lb. of seed is sufficient to sow an acre if the plants are to be singled. A row width of 14 to 18 in. facilitates tractor work. But if the land is free from perennial weeds, and if a selective weed killer is used to deal with annuals, little inter-row cultivation is required. Some growers treat the crop in much the same way as sugar beet. But on land that is in reasonably fertile condition the crop gives little response either to phosphate or nitrogen. Potash, however, will usually produce a response. Maincrop carrots are sown in April or early May.

The subsequent cultivation consist of keeping the land thoroughly clean by spraying, tractor-hoeing, and hand-weeding. The last is very laborious, and every effort should be made to eliminate it.

Motorized hoe-equipment is very suitable. Although carrots can stand a certain amount of frost, it is usual to lift and store in October or November those intended for the winter spring market

Упр. 8. Дайте английские эквиваленты.

Наша культурная морковь была получена от дикой моркови, обычного однолетнего или двухлетнего сорняка путем селекции; от мелких столовых сортов до крупных белых кормовых сортов; богаты каротином; тугорослые; сорняки; гербицид; используется для

уничтожения однолетних сорняков; морковь основного урожая; глубокие песчаные суглинки; глубокая или каменистая почва, убирать урожай, ширина ряда, плодородная земля, хранить урожай.

Упр. 9. Заполните пропуски в предложениях словами, данными под чертой.

1. Large-scale cultivation of carrots is practiced on ____ and ____.
2. Growing carrots on ____ is unprofitable.
3. Seedlings are so slow-growing that cannot ____.
4. The subsequent cultivation consist of keeping the land clean by ____, and ____.
5. ____ is very suitable.
6. Carrots can stand ____.
7. It is usual to ____ and ____ carrots in October or November.

Lift, motorized hoe-equipment, store, sandy loams, stony land, light peats, spraying, hand-weeding, compete with weeds, a certain amount of frost, tractor hoeing.

Упр. 10. Ответьте на вопросы.

1. What crop has our cultivated carrot been obtained from? 2. What varieties of carrot can you name? 3. What climatic conditions do carrots require? 4. On what soils do carrots grow best? 5. Why is clean land important? 6. What artificial fertilizers usually produce a response? 7. When are main crop sown? 8. What operations do the subsequent cultivation consist of? 9. Can carrot stand frost? 10. When is it usual to lift and store carrots?

Упр. 11. Прочитайте текст без словаря и перескажите его.

Carrot is a plant with an orange root that is eaten as a vegetable. Carrots contain B₁, B₂ and C. People eat raw carrot or in salads.

Carrots are grown from tiny seeds planted from 45 to 60 centimeters apart. They grow best in deep, rich soils that contain sand or manure, and are well-drained. Carrots can survive cold winters and can withstand much summer heat.

Carrots are native to the Mediterranean region (регион Средиземноморья). The ancient Greeks and Romans grew carrots. They used the plants as medicine but not as a food. Carrots resembling (напоминающие) modern types were later developed in France and were common in Europe by 1200's. Three main types of carrots are grown: long-rooted, medium-rooted and short-rooted.

UNIT 10

Упр. 1. Выучите следующие слова и словосочетания.

potato – картофель
to tolerate a rather highly acid conditions of the soil – выносить довольно высокую кислотность почвы
extreme deficiency of calcium – большая недостаточность кальция
do badly – плохо расти
moderate rainfall – умеренные осадки
blight – болезнь растений, характеризующаяся увяданием, гниением или прекращением роста
tubers – клубни
lowest moisture content – самый низкий процент содержания влаги
in good work in order – в хорошем состоянии для обработки
starch – крахмал
niacin – ниацин (никотиновая кислота)
riboflavin – витамин В₂
thiamine – витамин В₁
stem – стебель

Упр. 2. Переведите словосочетания, обращая внимание на степени сравнения прилагательных.

The most valuable crop, the most suitable soil, the most favourable season, the best eating quality, the lowest moisture content

Упр. 3. Переведите «цепочки существительных».

Farm plants, water supply, growing season, moisture content, planting time, potato plants.

Упр. 4. Соотнесите антонимы.

- | | |
|------------|-------------|
| 1) do well | a) often |
| 2) low | b) warm |
| 3) wet | c) high |
| 4) seldom | d) do badly |
| 5) cold | e) shallow |
| 6) few | f) dry |
| 7) deep | g) many |

Упр. 5. Переведите интернациональные слова без словаря.

Calcium, seasons, temperature, optimum, limit, phase, per cent, material, protein, vitamins, niacin, thiamine, phosphorus, insecticides, pesticides.

Упр. 6. Прочитайте и переведите текст.

The tubers

The potato was introduced from South America in the sixteenth century. As a producer of human food the potato is the most valuable crop grown in the world.

A potato consists of about 80 per cent water and 20 per cent solid matter. Starch makes up about 85 per cent of the solid material, and most of the rest is protein. Potato contains many vitamins, including niacin, thiamine and vitamin C. It also contains such minerals as calcium, iron, magnesium, phosphorus, potassium, sodium and sulphur.

The most suitable soil for potatoes is a light deep loam, but the crop does well on black-top or peaty land. The potato is one of the few farm plants that tolerate a rather highly acid condition of the soil, but the yield suffers where there is an extreme deficiency of calcium.

Potatoes do badly on heavy soils and under wet conditions. The most favorable seasons are those of moderate rainfall: in rainy seasons the temperature is too low for optimum growth and the incidence of blight is high; in dry summers the yield is often limited by the water supply. The best eating quality is generally obtained when the last phase of the growing season is fairly dry, as it is then that the tubers are formed with the lowest moisture content.

The time of planting depends upon the district and the variety that is being grown. It is a matter of prime importance that the land should be sufficiently dry and in good working order at planting time as a crop put in cold wet soil seldom develops satisfactorily.

A number of insects can attack potato plants and tubers. Insects that feed on potato plants can be controlled by spraying insecticides into the furrow at planting time. The roots absorb the insecticides and transport them to the stems and to the leaves. The pesticides kill insects that feed on the leaves. The pesticides kill insects that feed on the leaves. Other insecticides may be sprayed directly on the leaves. Insects that attack the tubers are controlled by spraying insecticides into the soil before planting.

Упр. 7. Дайте английские эквиваленты.

Самая ценная культура; легкий суглинок; хорошо расти; торфяные почвы; довольно высокая кислотность почвы; большая недостаточность кальция пагубно сказывается на урожае; картофель плохо растет; так как именно тогда образуются клубни с самым

низким процентом содержания влаги (или с высоким содержанием сухого вещества); в хорошем состоянии для обработки; умеренные осадки; вегетационный период; корни; листья; стебли; до посадки.

Упр. 8. Заполните предложения словами, данными под чертой.

1. Potatoes consist of 80 percent water and 20 per cent of_____.
2. _____ makes up 85 per cent of solid matter.
3. The most suitable soil for potato is_____.
4. Potatoes do badly on _____.
5. The time of_____depends upon the district and the_____.
6. Insects can attack potato plants and_____.
7. Insecticides can be sprayed into the_____or directly on the_____.

starch, heavy soils, variety, furrow, light deep loam, tuber, solid material, planting, leaves.

Упр. 9. Ответьте на вопросы.

1. What substances does potato consist of? 2. What vitamins does potato contain? 3. What is the most suitable soil for potato? 4. Can potatoes tolerate highly acid conditions of soil? 5. On what soils do potatoes grow badly? 6. When is the best eating quality obtained? 7. What does the time of planting depend on? 8 How can harmful insects be controlled?

Упр. 10. Прочитайте текст и расскажите об истории картофеля.

The potato is originated in South America. Most botanists believe the potato comes from a species that first grew in Bolivia, Chile and Peru. More than 400 years ago the Inca Indians of those countries grew potato in the valleys of the Andes Mountains.

Spanish explorers in South America were the first Europeans to eat potatoes. The Spaniards introduced them into Europe in the mid 1500's. About the same time, English explorers brought potato to England. From there potatoes were introduced into Ireland and Scotland. Potatoes were introduced into North America in the early 1600's. Today potato is the world's most widely grown vegetable and one of the most important foods.

UNIT 11

Упр. 1. Выучите следующие слова

cabbage – капуста

cruciferous – крестоцветный

appearance – внешний вид

to attain – достигать

body – структура

by manuring – благодаря удобрению навозом

to establish – (зд.) приниматься (о растении)

a good deal of – достаточное количество

parasite – паразит

greenhouse – теплица

hot bed – парник, паровая грядка, рассада

outdoor planting – высадка в открытый грунт

to prick out – пересаживать

to transplant – пересаживать (о растении)

2–6 inches apart – на расстоянии 2–6 дюймов

frame – защищенный грунт

acreage – площадь земли в акрах

to injure the roots – повредить корни

to reduce the yield – уменьшить урожай

irrigation – орошение

transplant – пикированная рассада, саженец, пересаженное растение

Упр. 2. Переведите следующие слова.

1) selection, selective, to select; 2) transplant, transplanting, to transplant; 3) to plant, planting, plant; 4) hardiness, hardy; 5) to resist, resistant, resistance.

Упр. 3. Переведите «цепочки существительных».

Cabbage varieties, heavy-land crop, seed boxes, transplanting machines, planting time, cabbage transplants.

Упр. 4. Соотнесите слова с их русскими эквивалентами.

- | | |
|-----------------------|---|
| 1) seedtime | a) семенной ящик |
| 2) seedbed | b) выведение сортовых семян |
| 3) seedbox | c) рядовая сеялка |
| 4) seed-breeding | d) сеянец, рассада |
| 5) seed-cleaning | e) рассадочная грядка; почва, подготовленная для посева |
| 6) seed-drill | f) сортоиспытательный участок |
| 7) seed-grower | g) питомник, рассадник |
| 8) seedling | h) зерноочистка |
| 9) seed-plot | i) семеновод |
| 10) seed trial ground | j) сев |

Упр. 5. Переведите предложения, обращая внимание на перевод модальных глаголов с инфинитивом в пассивном залоге.

1. The seedlings are to be pricked out or transplanted to hotbeds. 2. The plant should be set deep enough so that the first leaves are almost touching

the ground, 3. Provided (при условии если) the soil is dry at transplanting time, water should be added.

Упр. 6. Соотнесите синонимы.

- | | |
|-------------------|------------------|
| 1) a good deal of | a) to transplant |
| 2) greenhouse | b) to vary |
| 3) grow well | c) watering |
| 4) to prick out | d) area |
| 5) acreage | e) plenty of |
| 6) irrigation | d) do well |
| 7) to differ | e) hotbed |

Упр. 7. Поставьте глаголы в скобках в форму Present Indefinite Passive. Переведите предложения,

1. The seedlings (to transplant) to hotbeds. 2. Seed (to sow) in rows 2-6 inches apart. 3. For small acreages the plants (to transplant) by hand. 4. Transplanting machines (to employ) on large acreages. 5. Cabbage transplants (to give) the first irrigation soon after they (to transplant) in the field

Упр. 8. Прочитайте и переведите текст.

Forage crops

Cabbage. The cabbage is a cruciferous plant which has been obtained by a long process of selection from the wild cabbage. Cabbage varieties differ in appearance, size, hardness, and the time required for their development.

The cabbage is a typical heavy-land crop and attains its greatest perfection on strong clays that contain plenty of lime. However it grows well on light soils which have been given body by manuring. The crop does well anywhere in Britain and resists drought when once it is well established but it does not start well unless it gets a good deal of rain; in dry climate it is less resistant to parasites.

A common method of growing cabbage is to sow the seed in a greenhouse or hotbeds in seed boxes 4-6 weeks before outdoor planting. As soon as the true leaves appear about 2 weeks after sowing, the seedlings are to be pricked out to other flats or transplanted to hotbeds directly in the seed bed from 1 to 2 inches apart. Sometimes the seed is sown thinly in rows 2-6 inches apart in hotbeds and the seedlings are transplanted to other hotbeds or cold frames to be later transplanted in the field.

Provided the soil is dry at transplanting time, water should be added. The plant should be set deep enough so that the first leaves are almost

touching the ground. For small acreages the plants are usually transplanted by hand. Transplanting machines equipped to add water are usually employed where large acreages are to be set. In order to apply cultivation there should be ample space between plants at planting time. The cultivation should be shallow and only frequent enough for good control of weeds.

Deep cultivation can injure the roots and reduce the yield.

Cabbage transplants are generally given the first irrigation soon after they are transplanted in the field.

Упр. 9. Найдите в тексте эквиваленты следующих слов и словосочетаний.

Легкие почвы, которые получили свою структуру благодаря удобрению навозом; растения семейства крестоцветных; различаться по внешнему виду, размеру, морозоустойчивости; если она уже хорошо принялась; достаточное количество; множество; высадка в открытый грунт; должны быть пересажены, на расстоянии 2–6 дюймов.

Упр. 10. Заполните пропуски в предложениях словами, данными под чертой.

1. The cabbage is a ____.
2. Cabbage varieties differ in appearance, ____ and ____.
3. The cabbage is a typical ____.
4. Cabbage grows well on ____.
5. Seed is sown in ____ in ____.
6. In two weeks after sowing ____ are transplanted to hotbeds.
7. There should be ample space between plants at ____.
8. The cultivation should be ____.
9. Deep cultivation can ____ and ____.

size, hardiness, greenhouse, planting time, seedlings, shallow, strong clays, seed boxes, injure the roots, cruciferous plant, heavy-land crop, reduce the yield.

Упр. 11. Ответьте на вопросы.

1. What plant has the cabbage been obtained from?
2. Do cabbage varieties differ in appearance, size and hardiness?
3. On what soils does the cabbage grow well?
4. What is a common method of growing cabbage?
5. When are the seedlings to be pricked out?
6. How is the seed sown?
7. How should the plant be set?
8. Why should the cultivation be shallow?
9. When are cabbage transplants given the first irrigation?

Упр. 12. Прочитайте текст и расскажите о видах капусты.

There are three kinds of cabbage; white, red and savoy (савойская капуста). The leaves of the plant grow close together to form a hard round head (кочан). The leaves of the white and red cabbage are usually smooth (гладкий), but have veins (прожилки). White cabbage, which has pale green leaves, is the most popular type in most countries. People eat it raw in salads, cooked as a hot vegetable, or pickled as a sauerkraut (квашеная капуста). Red cabbage, with its reddish purple leaves, is not so popular as the white, but it can be eaten raw or cooked. The savoy type has the best flavor (вкус). Chinese cabbage is not a true cabbage. Its long, thin leaves form stalks similar to celery (сельдерей).

SUPPLEMENTARY TEXTS

Text 1

Food Crops

The greater proportion of man's food is derived from relatively few plant species. Most of the staple crops are members of the grass family that yield grains. Recent statistics show rice, wheat, and corn closely grouped as the "big three" in world cereal production. Each accounts for essentially one-quarter of the world's total cereal supply of more than a billion metric tons annually. Barley, oats, rye, millets, and sorghum together make up the remaining quarter.

Only one other food plant, the potato, a root crop, gives the cereals much of a run so far as world importance is concerned. Total tonnage of the potato is approximately equal to that of the leading grains but since the potato is fleshy and consists of only 22 percent dry matter, its total food value is considerably less. Sweet-potatoes and yams, various seed legumes (beans, peas, soybean, peanut, etc.), and sugar cane are the other major noncereal food crops. For all practical purposes man relies upon this handful of crop plants for his existence.

The modern world would grind to a standstill if it could not depend upon the gradual improvement of varieties of these domesticates, which lend themselves so well to modern mechanized agriculture. Many thousands of wild plants were utilized by primitive cultures. Since the fifteenth century these species have been spread widely over the globe, wherever they proved adaptable to local climate. Area of origin and major zone of today's production do not often coincide.

Text 2

The Cereals

Cereals are the staff of life to civilization. Around 70 percent of the world's harvested acreage of about a billion hectares, is devoted to growing them. They are the direct source of half the food needs of the world, and the secondary source of much additional food when converted to meat, milk, eggs, and other animal products.

The true cereals are all members of the grass family. The fruit they yield is a grain, a type of fruit in which the ovary wall turns hard and durable, fusing with the single seed. Buckwheat and a few similar seeds of other families ("pseudo-cereals") are sometimes regarded as grains because their seeds are quite similar to those of grasses. Major cereal crops are rice, wheat, maize, barley, oats, rye, sorghum, various millets, and a few other species of lesser world importance.

There are a number of reasons why cereals have evolved into man's leading food source. Most of them are annuals, or are at least adapted to cultivation as annuals, permitting facility in cropping, whether on the mid-den of an early domestication center or as a component of today's highly mechanized farming. Grasses in general are quite versatile, too; they adapt well to a variety of soils, climates, and ways of handling. They are also relatively efficient in garnering the sun's energy, transforming it into usable food substance. They are generally hardy and recuperative, and are plagued by no more than their share of diseases and pests. But above all, the grain is a neat package of stored, energy, conveniently harvested, easily cleaned and handled, amenable to storage without special drying.

Text 3

The Soil

Soil Formation. Soil is produced from rock by the process of weathering and by the activities of plants, animals and man. Primitive or igneous rocks, formed by the solidification of the magma in the process of the cooling of the earth consist of aggregates of mineral crystals which large or small according to the rate at which cooling took place. Each mineral is a chemical compound with specific chemical and physical properties. As soon as igne-

ous rocks are exposed to changing temperatures, moisture, etc. slow processes of disintegration and decomposition begin.

The weathering of a rock is generally due to a combination of physical and chemical actions. The weathered products of rock alone do not constitute a soil. Plants establish themselves very soon after weathering begins, and the mineral material thus becomes mixed with plant remains. These remains, in the process of decay, form an addition to the products of rock weathering. Soil is therefore a mixture of organic and inorganic material containing a large and complex population of living things.

The general character of a soil depends to a considerable extent on the nature of the parent material. Thus a coarse grained sandstone will generally produce a sandy soil, and a stratum of shale a "heavy" soil.

Text 4

Soil Fertility and Its Productivity

Soil fertility is a rather loose term used to indicate the potential capacity of a soil to grow a crop (or sequence of crops). The productivity of a soil is the combined result of fertility and management.

The fertility of a soil at any one time is partly due to its natural make-up (inherent or natural fertility) and partly due to its condition (variable fertility) at that time.

Natural fertility has an important influence on the rental and sale value of land. It is the result of factors which are normally beyond the control of the farmer, such as:

- 1) the texture and chemical composition of the mineral matter,
- 2) the topography (natural slope of the land) – this can affect drainage, temperature and workability of the soil,
- 3) climate and local weather – particularly the effects on temperature, and rainfall (quantity and distribution)

Soil condition is largely dependent on the management of the soil in recent times. It can be built up by good husbandry but if this high standard is not maintained the soil will soon return to its natural fertility level. The application of fertilizers can raise soil fertility by increasing the quantities of plant food in the growth and decay cycle.

Management can control the following production factors:

- 1) the amount of organic matter in the soil;
- 2) artificial drainage and irrigation;

- 3) erosion (removal of soil by wind and water);
- 4) pH of the soil, and the plant nutrients applied;
- 5) cultivations and time of planting;
- 6) variety and plant spacing;
- 7) sequence of cropping;
- 8) weeds, pests and diseases.

Text 5

Improved Plant Breeding

During the mid-1800's, an Austrian botanist and monk named Gregor Mendel discovered the principles of heredity. Mendel thus laid the groundwork for genetics – the science that explains how characteristics are inherited. The development of genetics during the 1900's has made it possible to breed plants and animals scientifically.

In the early 1900's, plant breeders in the United States developed a hybrid corn that produced unusually high yields. Various corn hybrids became commercially available in the 1920's. By the early 1960's, more than 95 per cent of all U.S. corn acreage was planted with hybrid seed. Average corn yields increased dramatically – from about 28 bushels per acre (69 bushels per hectare) in the early 1920's to as much as 118 bushels per acre (292 bushels per hectare) in the mid-1980's.

During the 1960's, scientists introduced varieties of wheat and rice that gave much higher yields than earlier varieties. The new varieties were intended mainly to help various poor nations, such as India and Mexico, increase their food supply. This effort proved so successful that it has been called the Green Revolution.

Text 6

New Agricultural Chemicals

Almost since the beginning of agriculture, farmers have used various substances to enrich the soil and to kill insect pests. For example, they have used wood ash and manure as fertilizers since prehistoric times. Arsenic, pyrethrum, and other natural poisons have long served as insecticides. Such substances were used because they worked. But little was known about why or how they worked.

Since the beginning of modern chemistry in the late 1700's, scientists

have produced many kinds of synthetic chemicals for use in agriculture. These chemicals include (1) fertilizers; (2) insecticides; (3) herbicides, or plant killers; and (4) chemicals to control plant and animal diseases. All these chemicals have helped increase farm production dramatically during the 1900's. But in some instances, agricultural chemicals have been over-used or used improperly and so have contributed to environmental pollution. In the United States, federal and state laws limit such practices and prohibit the use of chemicals that have been proved harmful.

Insecticides. In 1939, scientists in Switzerland developed a powerful chemical, called DDT, for use as an insecticide. By the early 1950's, U.S. farmers were using great quantities of DDT on their crops. But scientists then discovered that although DDT killed insect pests, it also endangered other animal life. In 1972, the U.S. government banned most uses of DDT, including its use in limning. Today, most American farmers use insecticides made of the chemical compounds organophosphate and carbamate.

Herbicides. Throughout history, farmers have had to fight against weeds. But until the mid-1900's, hand weeding, hoeing, and machine cultivating were almost the only methods farmers had to control weed growth. The first chemical herbicide, called 2,4-D, was patented in the United States in 1945. It quickly became and still is – the most widely used herbicide.

Chemicals to Control Diseases. Like weed growth, plant and animal diseases have always been difficult and costly problems for farmers. Many plant diseases are caused by tiny organisms called fungi. Since the mid-1800's, scientists have developed a number of chemicals known as fungicides to help fight these diseases. Some plant diseases are caused by viruses or bacteria. Chemicals have also been developed to help control these diseases. In addition, scientists continually develop plant varieties that have greater resistance to disease.

Text 7

Fertilizers

Fertilizer is a substance that is added to soil to help plants grow. Farmers use various kinds of fertilizers to help produce abundant crops. Home gardeners use fertilizers to raise large, healthy flowers and vegetables. Landscapers spread fertilizers on lawns and golf courses to help grow thick, green grass.

Fertilizers contain nutrients (nourishing substances) that are essential for

plant growth. Some fertilizers are made from organic waste, such as manure or sewage. Others are manufactured from certain minerals or are produced as synthetic compounds in factories.

People have used fertilizer for thousands of years – even though at one time they did not know why it was beneficial for plants. Long before they gained an understanding of plant nutrition, people noticed that animal droppings, wood ashes, and certain minerals helped plants thrive. During the 1800's and early 1900's, scientists identified the chemical elements that are essential for plant nutrition.

Today, farmers throughout the world use billions of dollars worth of fertilizer yearly. Increased production resulting from the use of fertilizer probably accounts for about a fourth of all crop production. Without fertilizer, greater amounts of land and labor would be needed to produce the same quantity of food and fiber.

Text 8

The Importance of Fertilizer

Green plants produce the food they use. They produce it by means of the process of photosynthesis. This process requires large amounts of nine chemical elements – carbon, hydrogen, oxygen, nitrogen, phosphorus, potassium, calcium, magnesium, and sulfur. It also requires smaller amounts of several other elements. These elements, called micronutrients because so little of each is needed, include boron, chlorine, copper, iron, manganese, molybdenum, and zinc.

Air and water provide most of the carbon, hydrogen, and oxygen that green plants need for growth. The other elements must come chiefly from the soil.

The elements plants receive from soil are normally provided by decaying plant and animal matter and dissolved minerals. But sometimes soil does not have enough of these substances, resulting in a need for fertilizer. The harvest of crops, for example, involves removing plants from the soil before they die and decay. The mineral elements contained in the crops do not return to the soil, and so fertilizer must be added to replace the elements. Nitrogen, phosphorus, and potassium are the elements in which soil is most frequently deficient.

Text 9

Kinds of Fertilizers

There are two chief kinds of fertilizers, mineral and organic. Manufacturers produce mineral fertilizers from certain minerals or synthetic substances. Organic fertilizers come from decayed plant or animal matter.

Mineral fertilizers are the most widely used fertilizers. They supply three main elements: (1) nitrogen, (2) phosphorus, and (3) potassium.

Nitrogen fertilizers, the most widely used mineral fertilizers, are produced mainly from ammonia gas. Manufacturers compress the gas into liquid forms, such as anhydrous ammonia and aqua ammonia, which may be applied directly to the soil. They also use ammonia in producing solid fertilizers, such as ammonium sulfate, ammonium nitrate, ammonium phosphate, and an organic compound called urea. Each of these fertilizers provides the soil with large amounts of nitrogen. Some, including ammonium sulfate and ammonium phosphate, furnish other elements as well as nitrogen.

Phosphorus fertilizers, also called phosphates, are made from the mineral apatite. Finely ground apatite may be applied to soil as a solid fertilizer called rock phosphate. Apatite also may be treated with sulfuric acid or phosphoric acid to make liquid fertilizers called superphosphates.

GLOSSARY

A

abundant – обильный
acid – кислотный
acreage – площадь земли в акрах
ample store – обильный запас
appearance – внешний вид
arable districts – земледельческие районы
artificial cross fertilization – искусственное перекрестное опыление
artificial fertilizers – искусственные удобрения
at the rate of – при норме посева
attain – достигать
average land – умеренно плодородная почва

B

barley – ячмень
barley suffers from fungoid diseases – ячмень подвержен грибковым заболеваниям
beans – бобы
biennial plant – двухлетнее растение
blight – болезнь растений, характеризующаяся увяданием, гниением или прекращением роста
body – структура
broadcast – разбрасывать (семена)
bushel – бушель (мера емкости 36,3 л)
by manuring – благодаря удобрению навозом
by product – побочный продукт

C

cabbage – капуста
calcareous loam – известковый суглинок
cereals – злаковые культуры
chalky boulder clay – известковая валунная глина
clay – глина
clay loam – иловатый суглинок
clover – клевер
cruciferous – крестоцветный
cultivate – возделывать

D

deep-rooted – с глубоким корнем
digestible protein – легкоусвояемый белок
drain – осушать
drill – высаживать, сеять рядами
drought – засуха
dwarf garden sorts – карликовые садовые сорта

E

earliness – скороспелость
embryo – (бот.) завязь
endanger – подвергать опасности
ensilage – силосование, силос
extreme deficiency of calcium – большая недостаточность кальция

F

facilitate – облегчать
fen – болото
forage – корм
frame – защищенный грунт
frost – мороз
furrow – борозда

G

germination – прораствание
gout-fly – зеленоглазка (зеленоглазая муха)
grasses – злаковые травы
greenhouse – теплица

H

hardiness – морозоустойчивость
hardy – морозоустойчивый
harrowing – боронование
hay – сено
hoe – мотыга
hotbed – парник, паровая грядка, рассада

I

inferior – худший

injure the roots – повредить корни
insect pests – насекомые-вредители
introduce – вводить, ввозить
irrigation – орошение

L

leaf-stripe – красно-бурая гельминтоспориозная пятнистость
legumes – бобовые (растения)
lime – известь
liming – известкование
loam – суглинок
low fibre content – низкое содержание волокон
luxuriant – буйный, пышный

M

maincrop carrots – морковь основного урожая
maize – кукуруза
malting – солодоращение
manure – компост, удобрение, удобрять
maturity – спелость, вызревание
millet – просо
minor forage crop – второстепенная культура
moderate rainfall – умеренные осадки
muriate – солянокислая соль

N

niacin – ниацин (никотиновая кислота)

O

oats – овес
outdoor planting – высадка в открытый грунт

P

parasite – паразит
peas – горох
peaty soils – торфяные почвы
pod – стручок
poor soil – неплодородная почва
potash – углекислый калий

potato – картофель
prick out – пересаживать
process – перерабатывать
pulp – жом (мякоть)
pulse crops – бобовые культуры

R

red beet – красная свекла
reduce the yield – уменьшить урожай
resistant to lodging – устойчивый к полеганию
riboflavin – витамин B₂
ripen – созреть
ripening – вызревание
rolling – прикатывание (каткование) почвы
rootcrops – корнеплоды
rot – гнить
rye – рожь

S

sandy – песчаный
seed – посев
seed – семена, зерно
seed-bed – пашня
selective weed killer – гербицид
shading – затенение
shallow land – неглубокая почва
single – прореживать
singling – пикировка (растений), прореживание
slow-growing – тугорослые
smut – головня, ржавчина (болезни растений)
soilacidity – кислотность почвы
soiling – зеленая подкормка
sorghum – сорго
sowing – посев, засекание
spread – распространяться
starch – крахмал
starchy and nitrogenous food material – питательные вещества, содержащие крахмал и азот
stem – стебель

stiffclay soils – грубые глинистые почвы (глиноземы)

stony – каменистый

straw – стебель, солома

sub soiling – подпочвенная вспашка

sugar beet – сахарная свекла

suitability – годность

supply – вносить

suppress – подавлять

T

thiamine – витамин В

thick-walled – толстостенный

thresh – молотить

threshing process – молотьба

till the soil – обрабатывать почву

tops – ботва

transplant – пересаживать (о растении)

transplant – пикированная рассада, саженец, пересаженное растение

tubers – клубни

U

unpalatable – невкусный, неприятный на вкус

W

watertable – уровень грунтовых вод

weeds – сорняки

wheat – пшеница

Y

yield – урожай

СОДЕРЖАНИЕ

Введение.....	3
Unit 1.....	4
Unit 2.....	7
Unit 3.....	10
Unit 4.....	13
Unit 5.....	16
Unit 6.....	19
Unit 7.....	22
Unit 8.....	25
Unit 9.....	28
Unit 10.....	32
Unit 11.....	34
SUPPLEMENTARY TEXTS	38
GLOSSARY	45

Колыбенко Ольга Сергеевна
Новицкая Вероника Леонидовна

AGRONOMY

2-е издание, дополненное и переработанное

Подписано в печать _____ Формат 60×84 ¹/₁₆. Бумага офсетная
Ризография. Гарнитура «Таймс». Усл. печ. л. _____. Уч.- изд. л. _____.
Тираж _____ экз. Заказ _____.

Отпечатано в УО «Белорусская государственная сельскохозяйственная академия».
Ул. Мичурина, 5, 213407, г. Горки