

科技英语 听力教程

● 刘志勇 叶碧玉编著

● 林郁如审校

● 上册



AN ENGLISH LISTENING COURSE
FOR SCIENCE STUDENTS
福建人民出版社

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前 言

《科技英语听力教程》是一套适合大专院校理工科高年级学生、研究生以及一般科技人员学习的听力教程。本教材分上下两册，每册配有60分钟录音磁带两盒。

本教材选自1987年至1988年第一季度《美国之音》广播电台特别英语节目中的科技新闻节目。内容涉及生物技术、遗传工程、农业技术、医学、环境保护、太空技术、计算机、考古、气象、新材料新技术等领域里的最新科研成果。对于理工科学生和一般科技人员来说，这也是一本信息感强，知识性、趣味性兼备的课外阅读材料。

为了教学和自学方便，我们每课只安排一条科技新闻，题目是编者加的。每课配有生词和词组的解释和各种训练听力的练习，课后还附有录音课文的全文以及中文参考译文。

本书的科技新闻录音稿由刘志勇听写并整理，听力训练的习题和录音课文的中文译文由叶碧玉、王善平编译，全书由林郁如审校。在整理录音稿的过程中得到美

籍教师Mrs. Shirley Harryman和Ms Shirley Porter以及菲籍教师Miss Maria Leticia Fideles等人的热情有益的帮助，在此谨表示衷心的感谢。

由于素材来自有声讯号，一些人名地名可能出现同音或近音别字的谬误（词典上可以查到的除外）。由于编者水平有限，时间比较匆促，错误缺点在所难免，欢迎读者指正。

编者

1990年元月

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I. Biotechnology 生物技术

Lesson 1

Biotechnology 生物技术

I. Turning in

Check to see if you know the meanings of these words.

biotechnology [baɪəʊ tek'nɒlədʒi] *n.* 生物技术

genetic engineering [dʒi'netɪk endʒɪ'nɪərɪŋ] *n.* 遗传工程

gene [dʒi:n] *n.* 基因

malaria [mə'leəriə] *n.* 疟疾

schistosomiasis [fɪstəsou'maɪəsɪs] *n.* 血吸虫病

firewood [faɪə'wud] *n.* 木柴, 火柴

erosion [i'rouʒən] *n.* 流失, 侵蚀

I. Checking up

1. Listen to the tape, and decide which of the following statements are True.

() 1) Genetic engineering is one of the processes of biotechnology.

() 2) John Alkinton wrote a book which was published by the World Resource Institute in

Washington.

- () 3) In 1960's scientists discovered the shape of DNA.
- () 4) The smaller pieces of DNA are called genes.
- () 5) Scientists learned how to break up genes in much early genetic engineering research.
- () 6) Biotechnology offers great promise for solving problems in developing countries.
- () 7) Scientists are also studying ways to use chemicals to grow trees, plant trees and stop soil erosion.
- () 8) John Alkinton believes the biotechnology industry can not help developing countries by itself.

2. Listen to the tape again. As you listen, choose the best answer to each of these questions.

1) When did the scientists discover the shape of DNA?

- A. In the 1940s.
- B. In the 1950s.
- C. In the 1960s

2) What does DNA decide? It decides_____

- A. If a person's eyes will be brown or blue.
- B. if an animal will be big or small.
- C. both A and B.

3) What did scientists learn in much early genetic engineering research?

They learned_____

- A. how to draw a map of DNA.
- B. how to break up genes from one plant to another.
- C. how to move genes from one plant to another.
- 4) What has been shown already by the scientists?
 - A. They can mix genes to create bigger and stronger crops.
 - B. They can produce supercrops.
 - C. They can plant more and more trees.
- 5) What's the other problem to work on products for the developing world? That is _____.
 - A. most new biotechnology companies have enough money to work.
 - B. most new biotechnology companies do not have enough money to work.
 - C. most new biotechnology companies do not have enough time to work.

II. Filling in

Listen to the first paragraph again, filling each blank with the information you hear.

1. Biotechnology is the name given to the many processes that involve_____.
2. John Alkinton is _____ on the biotechnology industry.
3. In a recent book he examined how America's biotechnology industry can influence _____.

4. The book was published by _____ in Washington.

IV. Drawing out

Listen to the tape again, and answer the following questions.

1. What did the scientists do in early genetic engineering research? Give an example.
2. What does biotechnology offer and what does it provide?
3. Why can biotechnology help reduce hunger?
4. Why should government and international organization provide economic and political support for the biotechnology industry?

Lesson 2

Another Nitrogen-Fixing Bacteria Is Discovered 新固氮菌的发现

I. Turning in

Check to see if you know the meanings of these words.

paddy ['pædi] *n.* 水稻, 稻谷

Heliobacillus [helioubə'siləs] *n.* 日光杆菌属

mobilus ['moubiləs] *a.* 运动的, 游动的

heliobacillus mobilus 游动日光杆菌

photosynthesis [fəʊtəʊ'sinθəsis] *n.* 光合作用, 光能合成

legume ['legiu:m] *n.* 豆科植物, 豆

rhizobium [rai'zoubiəm] *n.* 根瘤细菌属

cyanobacteria [sainoubæk'tiəriə] *n.* 青色细菌

algae ['ældʒi:] *n.* 藻, 藻类

blue-green algae 蓝绿藻

II. Checking up

Listen to the tape and find out the main idea of the passage by choosing A, B, or C.

1. The main idea of the passage is _____

A. *Heliobacillus mobilus* is a new kind of bacteria discovered by the scientists recently. They take nitrogen from the air and reproduce freely in the soil. They may be more useful than a living nitrogen fertilizer.

B. Most plants use the method photosynthesis to grow. They get nitrogen they need from chemical nitrogen fertilizers.

C. Cyanobacteria are widely used as a fertilizer in Asian rice paddies.

2. Are the following statements True or False? If a statement is false, what is the correct information?

- () 1) *Heliobacteria mobilus* provides nitrogen to rice plants. _____
- () 2) *Heliobacteria* take nitrogen from minerals in the soil. _____
- () 3) Most plants can use photosynthesis to grow, without any minerals in the soil. _____
- () 4) *Rhizobium* can help plants to get nitrogen from the air. _____
- () 5) *Rhizobium* bacteria live on the roots of all kinds of plants. _____
- () 6) *Heliobacteria* and plant depend on each other for survival. _____
- () 7) Cyanobacteria use the energy of sunlight to get nitrogen from the air. _____
- () 8) *Heliobacteria* can take nitrogen from the air

much faster than cyanobacteria. _____

III. Filling in

Listen to the first part of the tape again, fill each blank with the information you hear.

Professor Howard said the bacteria, heliobacillus mobilus, provides ____ 1 _____. The bacteria belongs to ____ 2 _____ first discovered ____ 3 _____ by Indiana University scientists.

Heliobacteria take nitrogen from ____ 4 _____. They use ____ 5 _____ to change the nitrogen ____ 6 _____ it needs to grow. Most plants also use this method—photosynthesis to grow, but they must get the nitrogen they need ____ 7 _____. And since all soil does not contain ____ 8 _____, many farmers must add ____ 9 _____ to their fields.

IV. Drawing out

Listen to the tape again and answer the following questions.

1. Who discovered heliobacillus mobilus first and when were they discovered?
2. Why should many farmers add chemical nitrogen fertilizer to their fields?
3. What's the difference between rhizobium and heliobacteria?
4. Why can heliobacillus mobilus be more useful

than a living nitrogen fertilizer according to
Prof. Gest's opinion?

Lesson 3

The Prospects of Bacterial Cellulose Is Very Bright 细菌纤维素前景广阔

I. Turning in

Check to see if you know the meanings of these words.

prospects ['prɒspekts] *n.* 前景, 前途, 前程

cellulose ['seljələʊs] *n.* 纤维素

Texas ['teksəs] *n.* 德克萨斯 (美国州名)

Acetobacter Xylinum 木醋杆菌

xylinum ['zailinəm] *a.* 木的

glucose [g'lu:kəʊs] *n.* 葡萄糖

polyester [pəli'æstə] *n.* 聚酯

bandage ['bændidʒ] *n.* 绷带

diaper ['daɪəpə] *n.* 尿布

coconut ['kəʊkənʌt] *n.* 椰子

pineapple ['paɪnæpl] *n.* 菠萝, 凤梨

II. Checking up

Are the following statements True or False? If a statement is false, what is the correct information?

- () 1. Acetobacter Xylinum bacteria can produce cellulose more easily. _____