

第 15 集：農業廢棄物的逆襲

有人說，一根香蕉皮的命運…就是被踩到，或被丟掉。

But what if I told you... it could become medicine?

如果我告訴你，他會成為藥物的原料？

邀請大家走進一場正在田野間悄悄上演的科技逆襲。

農業的廢棄物，或許將不是結束，而是另個更高端的開始。

有個科技界正在重新定義“垃圾”

A. News in Tech Tones

Agricultural waste is making headlines — through bioconversion, scientists are turning things like corn husks and fruit peels into eco-products we can actually use.

農業廢棄物登上科技頭條，科學家運用「生物轉化」技術，讓玉米殼、果皮變成有用的環保產品。

From green packaging to healing gels, this isn't just recycling — it's a new way to grow value from what we used to throw away.

從綠色包裝到療癒凝膠，這不只是回收，而是從「丟棄物中創造新價值」的一種革命。

B. Tech Key Words

Bioconversion 生物轉化

Bio- = relating to life or living organisms 與生命、生物有關的字首(prefix)

Conversion = the process of changing something from one form to another. 轉換、變化。

Bioconversion 用生物的力量所進行的轉換，例如：把廢棄物轉變成有用的資源。

對話練習：

A：We use bacteria or enzymes to turn farm waste into plastic, fertilizer - even energy.

我們會用細菌或酵素，把農業廢棄物變成塑膠、肥料，甚至能源。

B：That's bioconversion! Turning trash into tech—like a living factory!

這就是生物轉化！把垃圾變科技，就像一座會動的工廠！

C. If Technology can talk

如果科技會說話，”Bioconversion 生物轉換”會說什麼？

I turn leftovers into beginnings. I don't just recycle - I reimagine.

我把殘餘，變成開始。我不只是回收，而是重新想像的起點。

D. 字彙整理

Bacteria (noun) 細菌

Enzyme 酵素

Fertilizer 肥料

E. 關鍵字應用練習

Q1. What is bioconversion?

- ☐ A. Burning farm waste to make smoke.
- ☐ B. Using bacteria or enzymes to turn organic waste into useful products.
- ☐ C. Throwing waste into the landfill to save energy.

Q2. What products can be made through bioconversion?

- ☐ A. Plastic, fertilizer, or even energy.
- ☐ B. Diamonds and gold.
- ☐ C. Only food for animals.

Q3. Why is bioconversion important?

- ☐ A. It creates new value from agricultural waste instead of throwing it away.
- ☐ B. It produces more garbage.
- ☐ C. It stops plants from growing.

Q4. (造句練習 sentence builder) 請用” Bioconversion 生物轉換”造一個屬於你的句子。

舉例

主詞	動詞/動詞片語	其他元素
Scientists	are using	bioconversion to turn fruit peels into eco-friendly products.
Bioconversion	changes	farm waste into useful materials like fertilizer or bioplastics.
Farmers	benefit from	bioconversion because it reduces waste and

主詞	動詞/動詞片語	其他元素
	creates new value for farmers.	

我的句子：_____

Q5. Fill in the blanks (填空)

- Bioconversion uses _____ or _____ to transform waste.
- Agricultural waste can become _____, _____, or even _____.
- Bioconversion helps the environment by reducing _____.
- It reminds us that waste may actually be a _____.

(參考答案：bacteria • enzymes • plastic • fertilizer • energy • pollution • beginning)

生物轉化

用生物的力量，給廢棄物第二次生命。

下次，當你準備丟掉果皮、稻殼、瓶子，不妨停一下。

It's not waste. It's waiting.

你還記得上一次丟掉的，是不是也有機會重生呢？

等待被轉換成為新資源？