

## GENETIC ENGINEERING AND ITS PRODUCTS

Fatwa Commission of the Indonesian Ulema Council (MUI), after :

CONSIDER: a. that one of the results of scientific progress and technology is a genetic engineering technology;

b. that the public always expects a legal explanation

Islam on the practice of genetic engineering and its utilization

the products it produces;

c. that it is therefore considered necessary to establish a fatwa

about genetic engineering and its products to be used as

Guidelines.

مَنْ وَرَأَيْهِمْ جَهَنَّمَ وَلَا يُغْنِي عَنْهُمْ مَا كَسَبُوا شَيْئًا وَلَا مَا اتَّخَذُوا مِنْ دُونِ اللَّهِ أَوْلِيَاءَ ۗ وَلَهُمْ عَذَابٌ عَظِيمٌ ۝ ١٠ هَذَا هُدًى ۖ  
وَالَّذِينَ كَفَرُوا بِآيَاتِ رَبِّهِمْ لَهُمْ عَذَابٌ مِنْ رَجْزٍ أَلِيمٍ ۝ ١١ ﴿﴾ اللَّهُ الَّذِي سَخَّرَ لَكُمْ الْبَحْرَ لَتَجْرِي أَلْفُكُ فِيهِ بِأَمْرِهِ ۖ وَلِتَبْتَغُوا مِنْ  
فَضْلِهِ ۖ وَلَعَلَّكُمْ تَشْكُرُونَ ۝ ١٢ وَسَخَّرَ لَكُمْ مَا فِي السَّمٰوٰتِ وَمَا فِي الْأَرْضِ جَمِيعًا مِنْهُ ۗ إِنَّ فِي ذَلِكَ لَآيَاتٍ لِقَوْمٍ يَتَفَكَّرُونَ ۝ ١٣

“He ‘also’ subjected for you whatever is in the heavens and whatever is on the earth—all by His grace. Surely in this are signs for people who reflect.” (45:13)

وَهُوَ الَّذِي أَنْزَلَ مِنَ السَّمَاءِ مَاءً فَأَخْرَجْنَا بِهِ نَبَاتَ كُلِّ شَيْءٍ فَأَخْرَجْنَا مِنْهُ خَضِرًا نُخْرَجُ مِنْهُ حَبًّا مُتَرَاكِبًا وَمِنْ اللَّخْلِ وَمِنْ  
طَلْعِهَا قِنْوَانٌ دَانِيَةٌ وَجَنَّاتٍ مِنْ أَعْنَابٍ وَالزَّيْتُونَ وَالرُّمَّانَ مُشْتَبِهًا وَغَيْرَ مُتَشَابِهٍ ۗ انظُرُوا إِلَى ثَمَرِهِ إِذَا أَثْمَرَ وَيَنْعِهِ ۗ إِنَّ فِي  
ذَلِكَ لَآيَاتٍ لِقَوْمٍ يُؤْمِنُونَ ۝ ٩٩

“And He is the One Who sends down rain from the sky—causing all kinds of plants to grow—producing green stalks from which We bring forth clustered grain. And from palm trees come clusters of dates hanging within reach. ‘There are’ also gardens of grapevines, olives, and pomegranates, similar ‘in shape’ but dissimilar ‘in taste’. Look at their fruit as it yields and ripens! Indeed, in these are signs for people who believe.” (6:99)

وَهُوَ الَّذِي أَنْشَأَ جَنَّاتٍ مَعْرُوشَاتٍ وَغَيْرَ مَعْرُوشَاتٍ وَالنَّخْلَ وَالزَّرْعَ مُخْتَلِفًا أَكْلُهُ ۗ وَالزَّيْتُونَ وَالرُّمَّانَ مُتَشَابِهًا وَغَيْرَ  
مُتَشَابِهٍ ۗ كُلُوا مِنْ ثَمَرِهِ إِذَا أَثْمَرَ وَءَاتُوا حَقَّهُ يَوْمَ حَصَادِهِ ۗ وَلَا تُسْرِفُوا ۗ إِنَّهُ لَا يُحِبُّ الْمُسْرِفِينَ ۝ ١٤١

“He is the One Who produces gardens—both cultivated and wild<sup>1</sup>—and palm trees, crops of different flavours, olives, and pomegranates—similar ‘in shape’, but dissimilar ‘in taste’. Eat of the fruit they bear and pay the dues at harvest, but do not waste. Surely He does not like the wasteful.” (6:141)

إِنَّ فِي خَلْقِ السَّمَوَاتِ وَالْأَرْضِ وَاخْتِلَافِ اللَّيْلِ وَالنَّهَارِ لآيَاتٍ لِّأُولِي الْأَلْبَابِ ۚ ۱۹۰ الَّذِينَ يَذْكُرُونَ اللَّهَ قِيَامًا وَقُعُودًا وَعَلَىٰ جُنُوبِهِمْ وَيَتَفَكَّرُونَ فِي خَلْقِ السَّمَوَاتِ وَالْأَرْضِ رَبَّنَا مَا خَلَقْتَ هَذَا بَطِيلًا سُبْحَانَكَ فَقِنَا عَذَابَ النَّارِ ۚ ۱۹۱

“Indeed, in the creation of the heavens and the earth and the alternation of the day and night there are signs for people of reason. ‘They are’ those who remember Allah while standing, sitting, and lying on their sides, and reflect on the creation of the heavens and the earth ‘and pray’, “Our Lord! You have not created ‘all of’ this without purpose. Glory be to You! Protect us from the torment of the Fire.” (3:190-191)

أَلَمْ تَرَ أَنَّ اللَّهَ أَنْزَلَ مِنَ السَّمَاءِ مَاءً فَأَخْرَجْنَا بِهِ ثَمَرَاتٍ مُّخْتَلِفًا أَلْوَانُهَا ۚ وَمِنَ الْجِبَالِ جُدَدٌ بَيضٌ وَحُمْرٌ مُّخْتَلِفٌ أَلْوَانُهَا وَغَرَابِيبُ سُودٍ ۚ ۲۷ وَمِنَ النَّاسِ وَالْدَّوَابِّ وَالْأَنْعَامِ مُخْتَلِفٌ أَلْوَانُهُ ۚ كَذَٰلِكَ ۚ إِنَّمَا يَخْشَى اللَّهَ مِنْ عِبَادِهِ الْعُلَمَاءُ ۗ إِنَّ اللَّهَ عَزِيزٌ غَفُورٌ ۚ ۲۸

“Do you not see that Allah sends down rain from the sky with which We bring forth fruits of different colours? And in the mountains are streaks of varying shades of white, red, and raven black; just as people, living beings, and cattle are of various colours as well. Of all of Allah’s servants, only the knowledgeable ‘of His might’ are ‘truly’ in awe of Him. Allah is indeed Almighty, All-Forgiving. (35:27-28)

Hadith of the Prophet PBUH, including:

عَنْ سَلْمَانَ الْفَارِسِيِّ قَالَ: سُنِلَ رَسُولُ اللَّهِ صَلَّى اللَّهُ عَلَيْهِ وَسَلَّمَ عَنِ السَّمَنِ وَالْجَبْنِ وَالْفَرَاءِ، قَالَ: "الْحَلَالُ مَا أَحَلَّ اللَّهُ فِي كِتَابِهِ وَالْحَرَامُ مَا حَرَّمَ اللَّهُ فِي كِتَابِهِ، وَمَا سَكَتَ عَنْهُ فَهُوَ مِمَّا عَفَا عَنْهُ" (رواه ابن ماجه والبيهقي والحاكم والطبراني والترمذي)

"Salman al-Farisi said: The Prophet PBUH was asked about

oil, cheese and wool, he said: Halal is

what Allah has lawful in His Book, what is haram

which He forbids in His Book, while what is not mentioned in both is permissible." Ibn Majah, al-

Baihaqi, al-Hakim, at-Thabrani, and at-Tirmidhi

عن أنس رضي الله عنه أن رسول الله صلى الله عليه وسلم مر بقوم يلقحون النخل فقال: لو لم تفعلوا لصلح، قال: فخرج شيصا " تمرا ردينا" فمر بهم فقال: ما لنخلكم؟ قالوا: قلت كذا وكذا.. قال: أنتم أعلم بأمور دنياكم (رواه مسلم و ابن خزيمة وابن حبان).

From Anas ra, the Prophet (peace and blessings of Allaah be upon him) met

A group of people who are doing date palm seeding

Then the Prophet PBUH said: "If you had not

do (what you are doing now) might be better

results, and then (at harvest) the dates come out with

Poor quality. The Prophet (peace and blessings of Allaah be upon him)

while asking: "What is the condition of the harvest

Your dates? The companions said this and that.

The Prophet said: "You know better about the affairs of the world

"You are the best" (HR. Muslim, Ibn Khuzaimah, and Ibn Hibban)

عن ابن عباس قال قال رسول الله صلى الله عليه وسلم: لا ضرر ولا ضرار (رواه أحمد ومالك وابن ماجه)

Dari Ibnu Abbas RA, ia berkata: "Rasulullah SAW bersabda:

Tidak boleh membahayakan/merugikan orang lain dan tidak

boleh (pula) membalas bahaya (kerugian yang ditimbulkan

oleh orang lain) dengan bahaya (perbuatan yang

merugikannya)." (HR. Ahmad, Malik, dan Ibn Majah)

Qaidah fihiyyah:

"The law of origin of something useful is permissible/mubah"

"The original law of something beneficial is permissible and the original law of something harmful is haram".

"The original law regarding something is permissible as long as there is no

The evidence of the muktabar that forbids it."

"Everything depends on its purpose"

"In the wasilah (law) as the law on the

where he is going"

"Danger must be eliminated"

PAYING ATTENTION : 1. Explanation of Dr. Agus Pakpahan APU, Chairman of the Security Commission

Biological Genetically Engineered Products, and Dr. Bambang

Purwantara, DVM, MSc., Director of SEAMEO BIOTROP,

Member of the Commission on Biosafety of Genetically Engineered Products,

which essentially explains the process of genetic engineering,

practice, its development, and its use to

humanitarian interests and the potential impact that

it causes;

2. Statement and Explanation from LPPOM MUI delivered

by Dr. Mulyorini Rahayuningsih, Head of Auditing

LPPOM MUI on the use of genetic engineering products

in food products;

2. Fatwa of the VI National Conference of the Indonesian Ulema Council in

Jakarta Number: 3/Munas VI/MUI/2000 concerning Cloning;

3. Opinions, suggestions, and inputs that develop in the Session

MUI Fatwa Commission on July 19 and August 3, 2013.

By trusting in Allah SWT

STIPULATE : FATWA ON GENETIC ENGINEERING AND

THE PRODUCT

## First: General Provisions

In this fatwa, what is meant by:

1. Genes or DNA (Deoxyribose Nucleic Acid) are

Trait-carrying substances decrease from cell to cell, and generation generation, which is located within the chromosome, which has properties, among others, as a separate material contained in chromosomes, containing genetic information, can determine traits of an individual, and can duplicate themselves in cell division events.

2. Genetic Engineering is the application of genetics to

human interests, namely the application of biological techniques molecular to change the genetic makeup in chromosomes or alter the genetic expression system directed at certain utilities, whose object includes almost all groups of organisms, ranging from bacteria, fungi, animal levels low, high-level animals, to vegetation.

## Second: Legal Provisions

1. Doing genetic engineering on animals, growing-

plants and microbes (body of the kidneys) are mubah (can),

With the following conditions:

a. done for the benefit (useful);

b. does not harm (does not cause mudharat), good on humans and the environment; and

c. does not use genes or other parts derived from human body.

2. Genetically modified plants are halal and

can be used, provided :

a. useful; and

b. does no harm

3. Genetically modified animals are halal, provided that:

a. The animal belongs to the category of ma'kul al-lahm (type animals whose meat is halal to be consumed)

b. useful; and

c. harmless

4. Genetically engineered products in food, medicine, and

medicines, and cosmetics are halal with the following conditions:

a. useful

b. harmless; and

c. the source of origin of the gene in genetically engineered products is not comes from the haram.

Third: Closing Provisions

1. This fatwa is effective on the date specified, with the following

If in the future it turns out that repairs are needed, it will improved and refined as it should be.

2. So that every Muslim and those in need can

knowing this, appealed to all parties to

disseminate this fatwa.

# Summary: Genetic Engineering and Its Products (MUI Fatwa)

## Purpose of the Fatwa

- To provide **Islamic legal guidance** on the use of **genetic engineering technology** and its products.
- Responds to public demand for clarity on modern biotechnology.

## Key Definitions

- **Genes (DNA):** Carriers of hereditary traits in living organisms.
- **Genetic Engineering:** Scientific techniques used to **modify genetic material** in organisms (plants, animals, microbes) for specific purposes.

## Core Islamic Principles Used

- الأصل الإباحة → الأصل في الأشياء الإباحة (Default rule: **permissible unless proven otherwise**)
- لا ضرر ولا ضرار → **No harm should be caused**
- الأمور بمقاصدها → **Actions judged by intentions/purpose**
- الضرر يزال → **Harm must be eliminated**

 Overall principle:

**Permissible (halal) if beneficial and not harmful**

## □ Main Rulings (Ahkam)

### 1. Genetic Engineering in General

#### ☑ Permissible (mubah) if:

- It brings **benefit**
- It does **not harm humans or the environment**
- It does **not use human genetic material**

### 2. 🌱 Genetically Modified Plants

#### ☑ Halal and allowed if:

- Beneficial
- Not harmful

### 3. 🐄 Genetically Modified Animals

#### ☑ Halal and allowed if:

- The animal is originally **halal to eat**
- Beneficial
- Not harmful

### 4. 🧪 Genetically Engineered Products (Food, Medicine, Cosmetics)

#### ☑ Halal if:

- Beneficial
- Not harmful
- Genetic source is **not from haram origin** (e.g., prohibited animals or humans)

## Key Restrictions

- ✗ Use of **human genes** in genetic engineering
- ✗ Any application that causes **harm (mudharat)**
- ✗ Use of **haram sources** in genetic material

## Supporting Basis

- Qur'anic encouragement to **reflect on creation and utilize nature responsibly**
- Hadith emphasizing:
  - Permissibility unless prohibited
  - Human expertise in worldly matters
  - Avoidance of harm

## Overall Conclusion

Genetic engineering is **conditionally permissible in Islam**:

- ✓ Allowed when it benefits humanity and is safe
- ✗ Prohibited when it involves harm, human genetic material misuse, or haram sources