

750 million genetically modified mosquitoes to be released

25th August, 2020



Scientists in Florida will release 750 million genetically modified mosquitoes into the wild. The aim is to reduce the number of existing mosquitoes that have diseases like Zika virus, yellow fever and dengue fever. The plan is to release the mosquitoes next year in

the Florida Keys. This is a long chain of tropical islands stretching 170km south of the southern tip of Florida. The modified mosquitoes are all male. They carry a protein that will kill off any female offspring before they reach biting age. It is only female mosquitoes that feed on blood and bite humans. Males only feed on nectar from flowers. Over time, scientists hope the disease-carrying population of mosquitoes in the area will fall.

Environmental groups are not happy with the plan to release the genetically modified mosquitoes. One group called it a "Jurassic Park experiment". It said Florida was "a testing ground for mutant bugs". Many environmentalists warn that the project could cause damage to local ecosystems that could never be reversed. They say the experiment could even create a new super-species of mosquito that is resistant to insecticides. The environmental group Friends of the Earth said: "The release of genetically engineered mosquitoes will needlessly put Floridians, the environment and endangered species at risk in the midst of a pandemic." The company releasing the mosquitoes said there was no risk.

Sources: baynews9.com / sciencenews.org / bbc.com /

Writing

The creation of all GM food and creatures should be banned. Discuss.

Chat

Talk about these words from the article.

scientist / genetically modified / the wild / yellow fever / Florida / blood / bite / nectar / environmental / experiment / mutant / bugs / ecosystem / insecticide / species / risk

True / False

- a) The government will release millions of genetically-modified mosquitoes. T / F
- b) The mosquitoes will be released all over the state of Florida. T / F
- c) The genetically-modified mosquitoes are male. T / F
- d) Only female mosquitoes bite us. T / F
- e) An environmental group was happy with this project. T / F
- f) Hollywood will base the next Jurassic Park movie on this project. T / F
- g) Environmentalists say a new super-mosquito could be created. T / F
- h) The company releasing the mosquitoes said there was a little risk. T / F

Synonym Match

(The words in **bold** are from the news article.)

- | | |
|----------------------------|--------------------|
| 1. release | a. halfway through |
| 2. aim | b. changed |
| 3. modified | c. decrease |
| 4. offspring | d. monster |
| 5. fall | e. goal |
| 6. experiment | f. bug spray |
| 7. mutant | g. set free |
| 8. damage | h. test |
| 9. insecticide | i. harm |
| 10. in the midst of | j. young |

Discussion – Student A

- a) What do you think about what you read?
- b) What do you think of mosquitoes?
- c) Why aren't environmental groups happy?
- d) What might mutant mosquitoes look like?
- e) How important are environmental groups?
- f) How would you feel if the mosquitoes were released in your town?
- g) How risky do you think this experiment is?
- h) What questions would you like to ask the scientists?

Phrase Match

- | | |
|----------------------------------|------------------------------|
| 1. into the | a. and bite humans |
| 2. The aim is to reduce | b. fever |
| 3. yellow | c. of a pandemic |
| 4. a long chain of tropical | d. the number |
| 5. mosquitoes that feed on blood | e. species of mosquito |
| 6. One group called it a " | f. islands |
| 7. a testing ground for mutant | g. ecosystems |
| 8. cause damage to local | h. wild |
| 9. create a new super- | i. Jurassic Park experiment" |
| 10. in the midst | j. bugs |

Discussion – Student B

- What do you know about mosquitoes?
- What do you do to avoid mosquitoes?
- What do you know about Zika virus and yellow fever?
- How dangerous are mosquitoes?
- What use are mosquitoes?
- What do you think of releasing genetically-modified insects?
- What could go wrong with this experiment?
- What's best for a mosquito bite?

Spelling

- The aim is to cdeeru the number
- yellow evfr
- a long chain of oicptlra islands
- The idoiedfm mosquitoes are all male
- kill off any female rpsifnfgo
- the issdaee-carrying population
- a testing ground for antutm bugs
- damage to local osesytmsec
- They say the xerenpietm could
- The mtniaoenelrv group
- endangered ecseips
- in the midst of a dceipman

Answers – Synonym Match

| | | | | |
|------|------|------|------|-------|
| 1. g | 2. e | 3. b | 4. j | 5. c |
| 6. h | 7. d | 8. i | 9. f | 10. a |

Role Play

Role A – Mosquitoes

You think mosquitoes are the scariest things to genetically modify. Tell the others three reasons why. Tell them why their things aren't as scary. Also, tell the others which is the least scary of these to modify (and why): humans, plankton or rice.

Role B – Humans

You think humans are the scariest things to genetically modify. Tell the others three reasons why. Tell them why their things aren't as scary. Also, tell the others which is the least scary of these to modify (and why): mosquitoes, plankton or rice.

Role C – Plankton

You think plankton is the scariest thing to genetically modify. Tell the others three reasons why. Tell them why their things aren't as scary. Also, tell the others which is the least scary of these to modify (and why): humans, mosquitoes or rice.

Role D – Rice

You think rice is the scariest thing to genetically modify. Tell the others three reasons why. Tell them why their things aren't as scary. Also, tell the others which is the least scary of these to modify (and why): humans, plankton or mosquitoes.

Speaking – GM

Rank these with your partner. Put the most worrying things to genetically modify at the top. Change partners often and share your rankings.

- | | |
|------------|----------------|
| • Viruses | • Mosquitoes |
| • Rice | • Dinosaur DNA |
| • Plankton | • Tomatoes |
| • Cows | • Humans |

Answers – True False

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| a | F | b | F | c | T | d | T | e | F | f | F | g | T | h | F |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

Answers to Phrase Match and Spelling are in the text.