

Centipedes eat animals 15 times their size

26th January, 2018



Centipedes are the kind of creatures that are not to be messed with. Their venom packs a serious punch and can cause rapid paralysis and death in insects and small animals. They have even been known to kill people with their highly venomous sting.

Scientists have now discovered a deadly toxin in centipede venom that can shut down the hearts of animals that are 15 times bigger than them. The scientists isolated a toxin in the Chinese red-headed centipede. This beast can grow to roughly eight inches in length. The toxin in its venom blocks potassium from moving in and out of cells. This blocking of potassium prevents the brain from sending signals to the heart to beat, thus causing a rapid death.

The venom is rarely fatal for humans, but it can cause agonizing pain and swelling for up to two weeks. The scientists have called it SSM Spooky Toxin. Researcher Shilong Yang, an expert in toxins at China's Kunming Institute of Zoology, explained: "The centipede's venom has evolved to simultaneously disrupt cardiovascular, respiratory, muscular and nervous systems. This molecular strategy has not been found in other venomous animals." Despite their name (centi is "hundred" in Latin and pedis is "foot"), centipedes do not have 100 legs. They have a varying number of legs, ranging from 30 to 354. Centipedes always have an odd number of pairs of legs. This means no centipede has exactly 100 legs.

Sources: sky.com / mnn.com / washingtonpost.com

Writing

We should never kill centipedes and insects. Discuss.

Chat

Talk about these words from the article.

careful / centipedes / poisonous / deadly / small animals / venom / potassium / heart / fatal / scientist / expert / cardiovascular / strategy / hundred / varying / odd numbers

True / False

- a) The article suggests people should mess with centipedes. T / F
- b) Centipedes punch insects and small animals. T / F
- c) Scientists looked at a toxin in a Chinese centipede. T / F
- d) The toxin pumps potassium from cells to an animal's brain. T / F
- e) A centipede sting can swell up for two weeks. T / F
- f) Scientists named the toxin SSM Spooky. T / F
- g) Centipede means 100 legs. T / F
- h) A centipede can have fifty pairs of legs. T / F

Synonym Match

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

- | | |
|--------------------------|-----------------|
| 1. creatures | a. differing |
| 2. paralysis | b. pinpointed |
| 3. deadly | c. severe |
| 4. isolated | d. fatal |
| 5. prevents | e. concurrently |
| 6. agonizing | f. beasts |
| 7. expert | g. precisely |
| 8. simultaneously | h. stops |
| 9. varying | i. immobility |
| 10. exactly | j. specialist |

Discussion – Student A

- a) What do you think about what you read?
- b) How painful do you think a centipede might be?
- c) What would it be like to be an expert in zoology?
- d) How could scientists use the centipede venom to help humans?
- e) What do you think of the name "centipede"?
- f) What would life be like with more legs?
- g) Why do centipedes need so many legs?
- h) What questions would you like to ask the researchers?

BreakingNewsEnglish - The Mini Lesson

Phrase Match

1. the kind of creatures that are not
 2. Their venom packs
 3. cause rapid paralysis
 4. This beast can grow to roughly
 5. prevents the brain from sending
 6. The venom is rarely fatal
 7. respiratory, muscular and
 8. found in other venomous
 9. ranging
 10. Centipedes always have an odd
- a. and death in insects
 - b. number of pairs of legs
 - c. signals to the heart
 - d. for humans
 - e. animals
 - f. to be messed with
 - g. from 30 to 354
 - h. eight inches in length
 - i. a serious punch
 - j. nervous systems

Discussion – Student B

- a) What do you think of centipedes?
- b) What is your favourite insect, and why?
- c) What other creatures should never be messed with?
- d) Why do the centipedes have such a poisonous toxin?
- e) What other ways do animals have of protecting themselves?
- f) What function do centipedes play in the natural world?
- g) What do you know about centipedes?
- h) What would you do if a centipede was on you?

Spelling

1. eesucrtra that are not to be messed with
2. cause rapid rsaiysalp
3. highly uonsoevm sting
4. The scientists ioeatdls a toxin
5. grow to rulgyoh eight inches in length
6. prevents the brain from sending ilsgasn
7. it can cause nagiionzg pain
8. wsilgenl for up to two weeks
9. an rtpeex in toxins
10. The "centipede's venom has eovldve
11. respiratory, arsumulc and nervous systems
12. They have a nvgayri number of legs

Answers – Synonym Match

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

Role Play

Role A – Centipedes

You think centipedes are the best creepy-crawlies. Tell the others three reasons why. Tell them what is wrong with their bugs. Also, tell the others which is the worst of these (and why): ants, worms or beetles.

Role B – Ants

You think ants are the best creepy-crawlies. Tell the others three reasons why. Tell them what is wrong with their bugs. Also, tell the others which is the worst of these (and why): centipedes, worms or beetles.

Role C – Worms

You think worms are the best creepy-crawlies. Tell the others three reasons why. Tell them what is wrong with their bugs. Also, tell the others which is the worst of these (and why): ants, centipedes or beetles.

Role D – Beetles

You think beetles are the best creepy-crawlies. Tell the others three reasons why. Tell them what is wrong with their bugs. Also, tell the others which is the worst of these (and why): ants, worms or centipedes.

Speaking – Insects

Rank these with your partner. Put the best insects / creatures at the top. Change partners often and share your rankings.

- wasps
- beetles
- mosquitos
- bees
- centipedes
- ants
- butterflies
- worms

Answers – True False

a	F	b	F	c	T	d	F	e	T	f	T	g	T	h	F
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Answers to Phrase Match and Spelling are in the text.