

Bio Kiz FOR Kids
NO. 1



Insects Who Rule the World



The background of the page is a light blue gradient. On the left side, there is a detailed illustration of a tree with green leaves. Various insects are scattered across the scene: a large black and yellow butterfly at the top left, a dragonfly in the upper middle, a beetle on a tree branch, a red and black butterfly, a large stag beetle on the tree trunk, a brown moth, a grasshopper, a group of ants at the bottom, a green beetle, and a black beetle. In the top right, a globe is surrounded by the text "Insects Who Rule the World" in a curved, orange font. A small butterfly and a bee are also near the globe.

Insects Who Rule the World

Insects are invertebrate animals within the Phylum Arthropoda (having external skeletons). There are approximately 8,000,000 species of insects found but only 1,000,000 were named. Insects are in the Order Hexapoda (a group of animals having 6 legs) and having hard outer coverings that support and protect themselves. Insects are organisms that have the largest population in the world.

Butterflies and Moths

What are the differences between butterflies and moths? Butterflies are active during the day and mostly have brighter colours while moths are active during the night and have dull colours.



Butterflies sip nectar through their long thin mouths.



Life cycle of a butterfly comprises 4 stages: egg, larva, pupa and adult.

Our life is so short.
We help put pollen into flowers
and beautify nature. Let us keep
doing our duties. Don't catch us just
because we're more beautiful
than others.

Ants and Bees

Ants is one of the worlds' strongest creature in relation to its size. They can carry things 50 times heavier than their own weight. It is like a man lifting a small elephant.



Bees live together in a colony. There could be up to 500,000 bees crowded in one single hive.



As busy as bees. These little hard workers could fly for several kilometers just to collect nectar. They may visit as many as 500 flowers in one trip to gether nectar. Can you believe that it takes 1,000 trips for a bee to collect just one teaspoon of honey?

We work hard and love each other.
Warning! You'll get painful stings
if bully us!

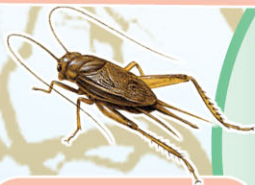
The musicians of forests



Cicadas: Our chorus can be heard all over the forest, warning of summer coming.



Grasshoppers: We use our wings and legs as musical instruments, just like violinists.



Crickets: We're vocalists of the night, singing underneath the stars.

"The man that has no music in himself, Nor is not moved with concord of sweet sounds, Is fit for treasons, stratagems and spoils; The motions of his spirit are dull as night And his affections dark as Erebus: Let no such man be trusted. Mark the music."

--William Shakespeare

When getting exhausted come, listen to us, musicians of the wild.



Beetles



There are 300,000 species of beetles in the world.

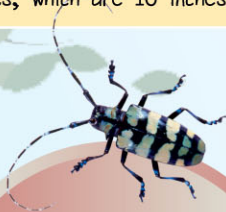


A record breaker

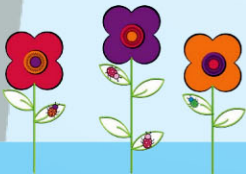
Giant African Beetles are the heaviest living beetles in the world. They weigh 4 pounds and have green shiny stripes like a tiger. They win the gold medal for insect running race with an amazing speed of two feet per second. They have the longest antennae among insects, which are 10 inches.



Forests in the night are sparkling with these live-lighter the fireflies.

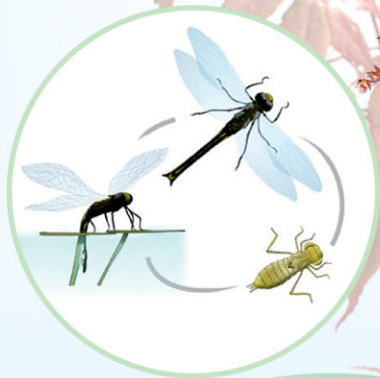


In day time, we're ornamental gems of forests while at night we decorate darkness with our lights. Don't hurt us by catching us!



Dragonflies

Dragonflies are the king of the sky. They are well-known of flying at great speed. They can go upwards like a rocket, dive down, spin, turn, hover in mid-air and backwards at high speed.



They spend their early days under the water and fly into the sky when they grow up.

We are sky hunters. We and farmers are friends. We help them catch insect pests and mosquitoes which are diseases carrier. If you meet us anywhere, don't bully us though.

Do you know how many insects



are hiding in the garden?



answers: 22 insects

Status of Insects



What makes insects extinct ?

Insects are well known for being able to produce a lot of offspring and adapt to the environment very well.

Then why some of them become extinct? The causes of their extinctions are:



1) Insects themselves. They are not able to adapt themselves to the changing environment.

2) Deforestation. Forests which are their home and source of food are destroyed.

3) Environment. Temperature rising, forest fire and flood are related to the first cause mentioned above.

4) Overuse Exploitation. Human overuse insects for their own good without thinking of giving them back to nature.



Thank you

Introduction to Entomology

<http://images.google.co.th>

<http://www.dnp.go.th/foremic/center2/karet/tip.htm>

<http://www.greenfacts.org/en/biodiversity/figtableboxes/1011-species-nb.htm>

<http://www.antark.net/ant-facts/#.Up6pzNLwbJ9>

More information is available at

<http://chm-thai.onep.go.th>

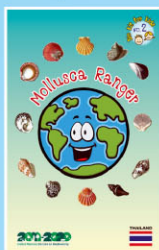


Bio Kit for Kids

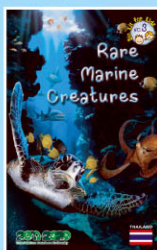
No. 1



No. 2



No. 3



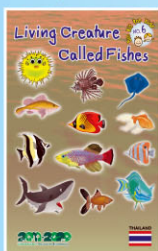
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No. 5



No. 6



No. 7



Biological Diversity Division
Office of Natural Resources and Environmental
Policy and Planning
Ministry of Natural Resources and Environment
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