/reducing_co2_through_insects

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bio&agri_zero/mdef2021

/CO2_in_Barcelona

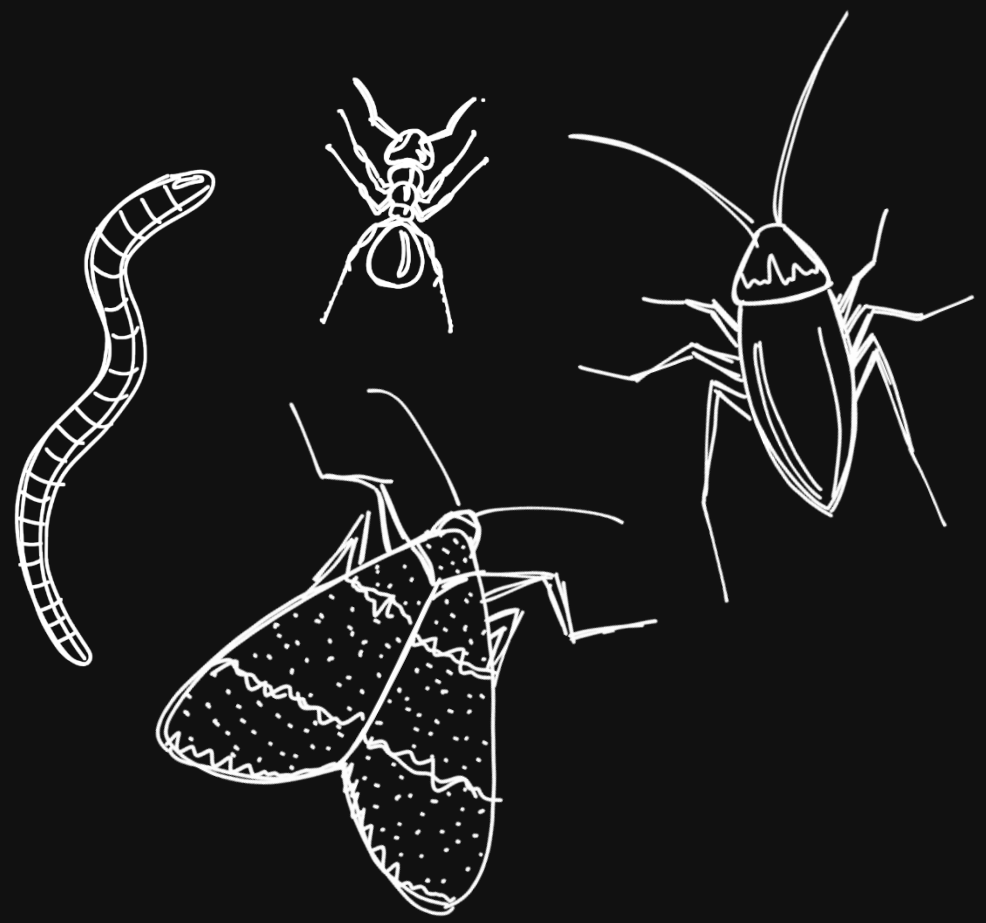
16,3 million
tons of CO2 each year

_**7,6M tons of CO2** from the airport

_**5,3M tons of CO2** from the port

_**3,4M tons of CO2** from the city (services, industries, etc.)

/insects_in_the_city



_**10 quintillion insects** in the world **|** **40%** of all known **living species**

_**10.000 million** insects/km²

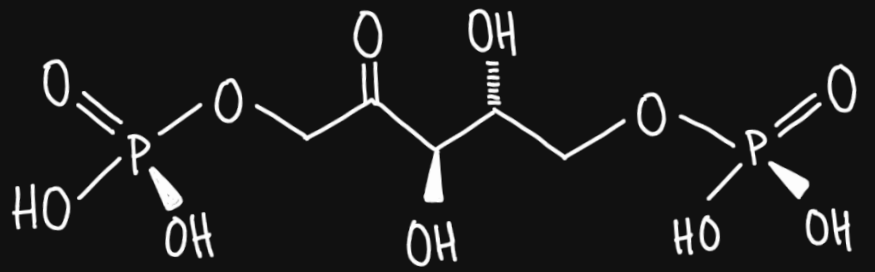
_Barcelona has **101,9km²**

10.000M * 101,9km²=

1.019.000M insects

/RuBisCO_protein

ribulose-1,5-bisphosphate carboxylase-oxygenase

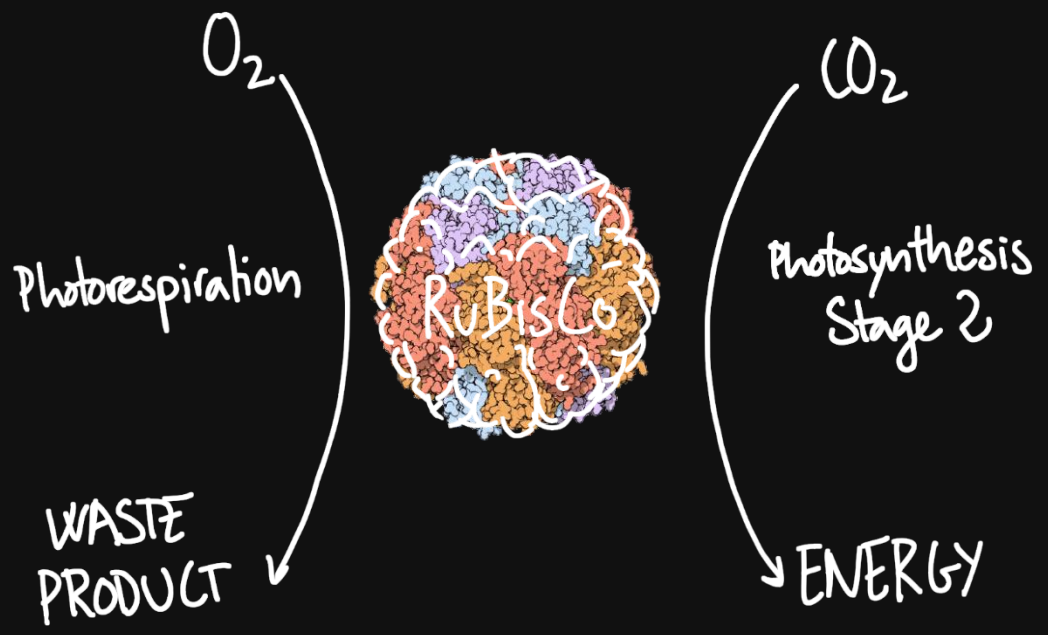


_**most abundant protein** on earth

_process of **carbon fixation**

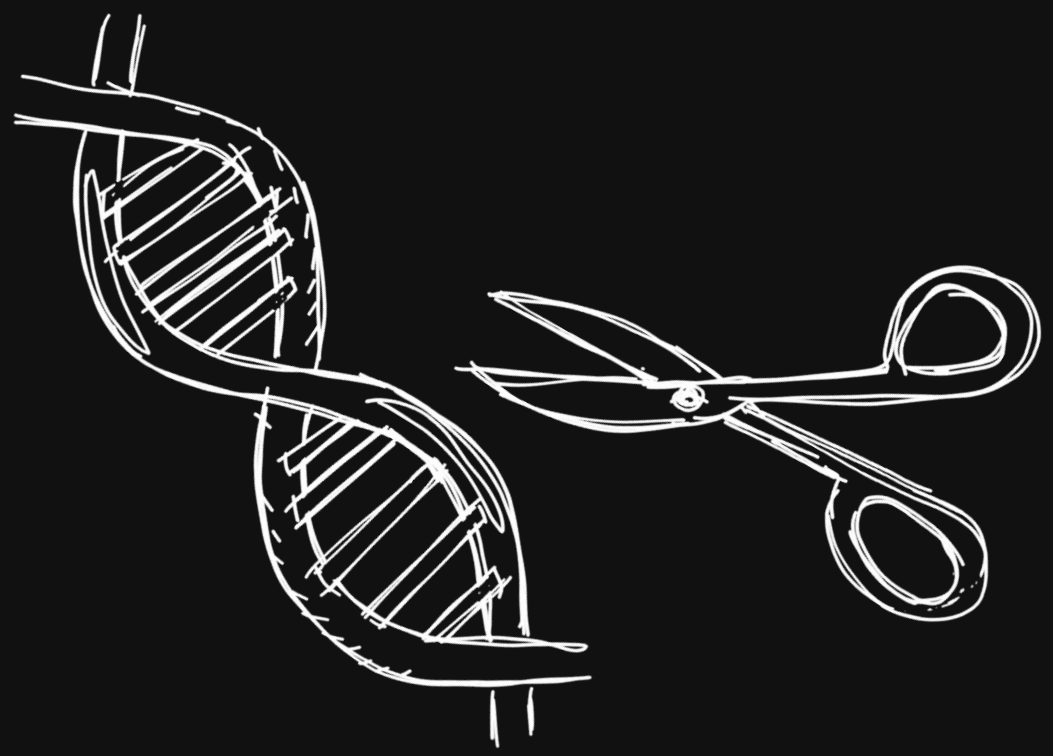
_**photorespiration** from oxigen

_responsible for the **photosynthesis**



/using_CRISPR-Cas9

Clustered Regularly Interspaced Short Palindromic Repeats



_tool to **edit the genome** of any cell

_uses a **guide RNA** and an **endonuclease enzyme** to **cut de DNA**

_we can add the **RuBisCO protein** to **insects genome** with CRISPR-Cas9 to **reduce CO2** from the atmosphere

/reflections

_even given the amount of **insects**, there are **tons of CO2** in the atmosphere

_completely **unethical**

_instead of modifying insects, **we should change our behaviour towards the planet**

/references

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