NITROSCOPE

# NITROGEN USE EFFICIENCY



Nitrogen Use Efficiency is a measure of how much fertiliser a plant **actually utilises** for its growth versus how much is **wasted in the environment.**

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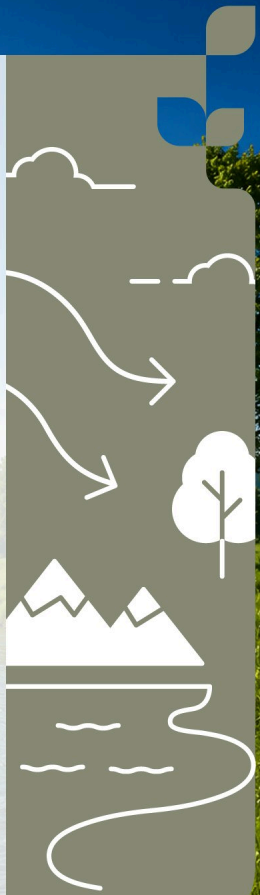
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# NITROGEN FLUXES

Nitrogen fluxes are the various **flows of nitrogen** as it circulates through **land, water and air.**



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# SOIL NITROGEN FLUXES



Soil nitrogen fluxes are the various routes of nitrogen in the ground, the moves through the earth to **feed the plants** or the **escapes back into the environment.**

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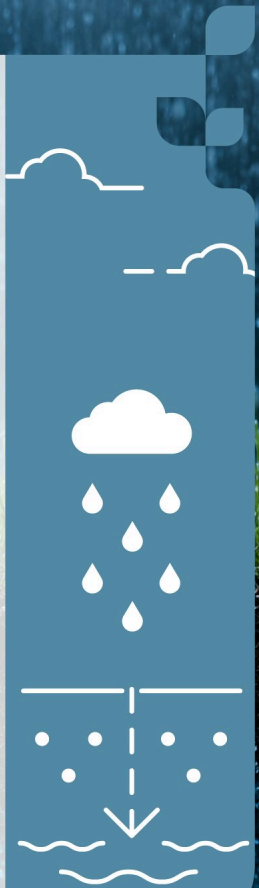
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# NITRATE LEACHING



Nitrate leaching happens when excess nitrogen from fertiliser is washed down through the soil by **rain or irrigation**, moving past the plant's roots and ending into the **groundwater**.

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# NITROUS OXIDE EMISSIONS

Nitrous oxide emissions are the gases that **rise from the soil into the air** when nitrogen from fertilisers isn't **fully used by plants**.



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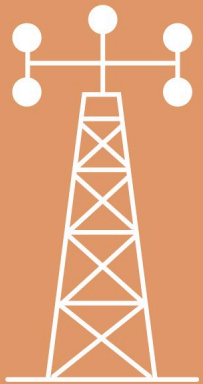
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# EDDY COVARIANCE TOWER



It is a **high-speed monitoring station** that tracks the **flow of gases** as they swirl between the earth and the air in **real-time**.

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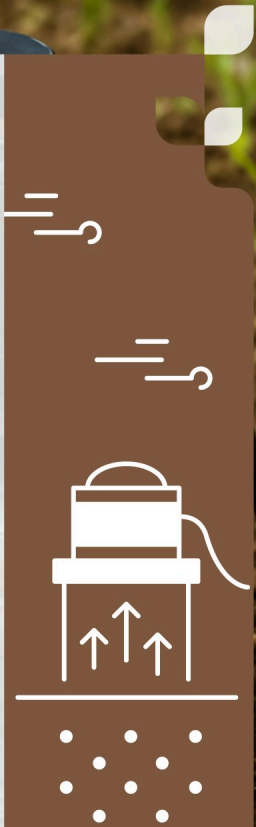
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# AUTOMATED FLUX CHAMBER



It is **a self-operating lid** that seals off a patch of dirt to **catch and measure the gases** rising from the soil into the air.

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# NITROGEN POLLUTION



Nitrogen pollution is the **environmental damage** caused when excess nutrients spill out of farms into **water, soil and air**.

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