TEAM NAME : FLAUNA COENOSE

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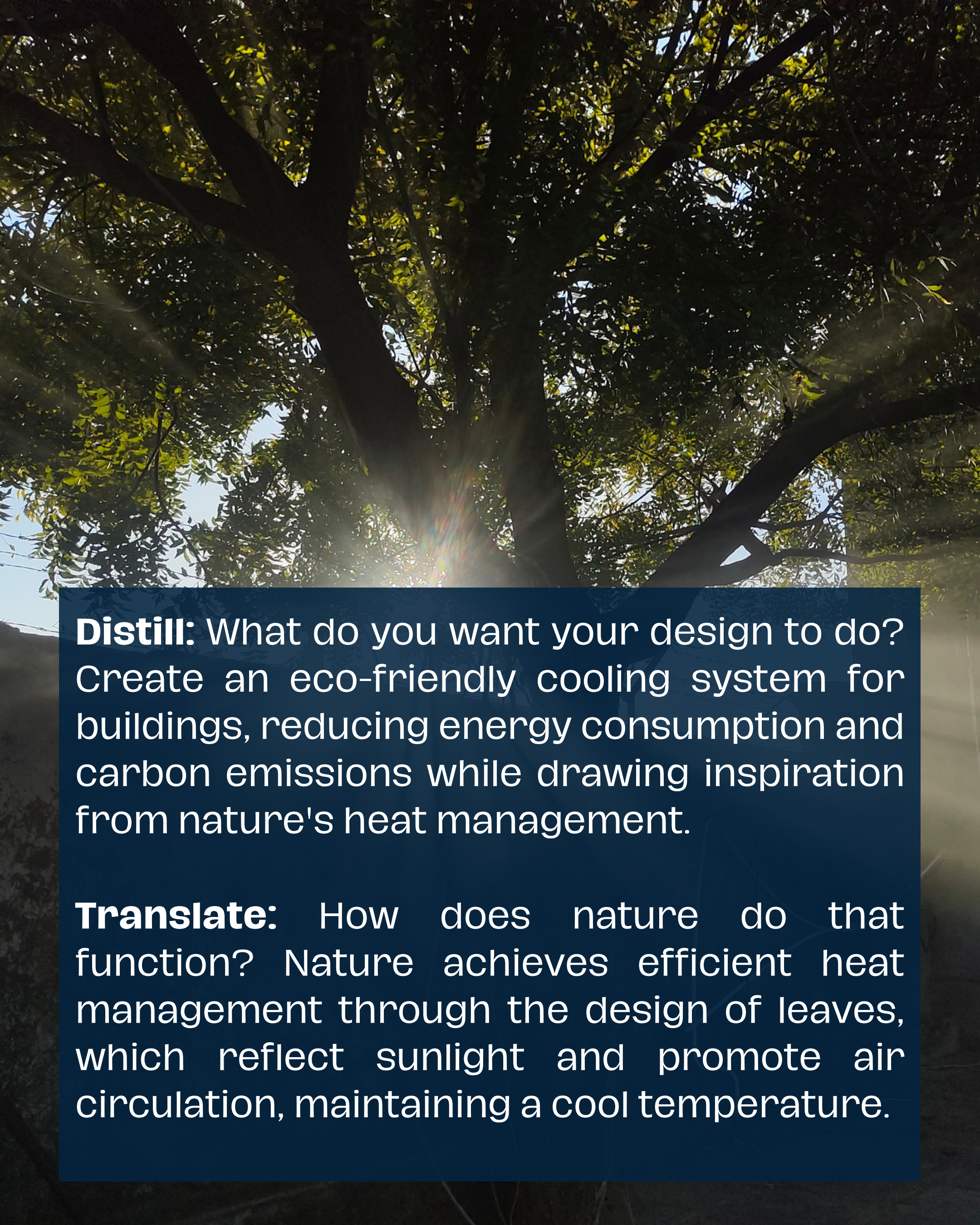
COLLEGE NAME : Jaipur Engineering College And Research Centre

Inspired by observing the intricate patterns of leaves in a forest, I envision a passive cooling system for buildings. This system would mimic the way leaves are designed to reduce heat absorption and enhance heat dissipation.

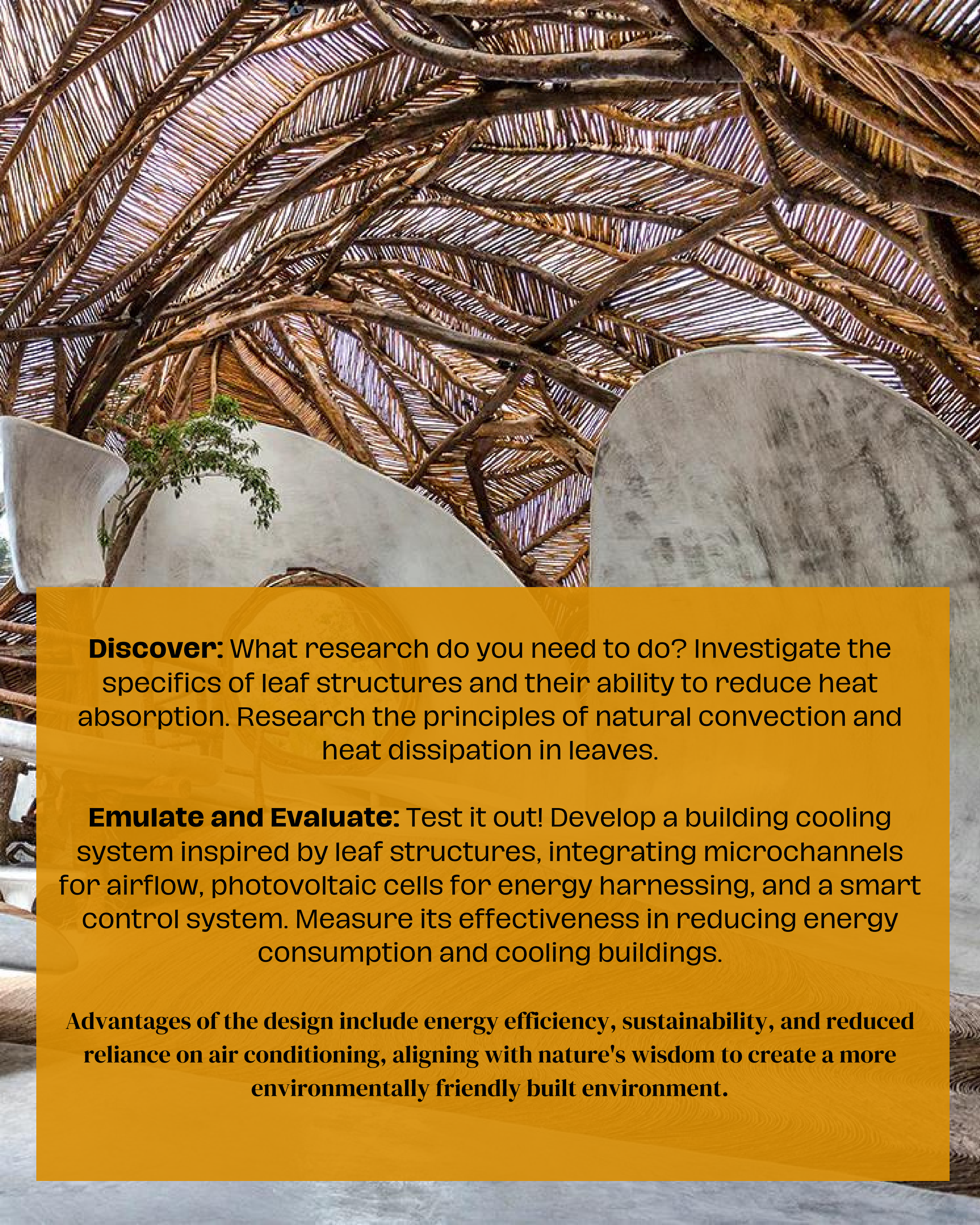
Inspiration: The leaves' ability to maintain a cool temperature by reflecting sunlight and promoting air circulation.

Function: The system serves as an eco-friendly cooling solution for buildings. It reduces energy consumption by passively cooling the structure, lowering the need for air conditioning. The design draws inspiration from nature's efficient heat management, ultimately contributing to more sustainable and energy-efficient architecture.



Distill: What do you want your design to do? Create an eco-friendly cooling system for buildings, reducing energy consumption and carbon emissions while drawing inspiration from nature's heat management.

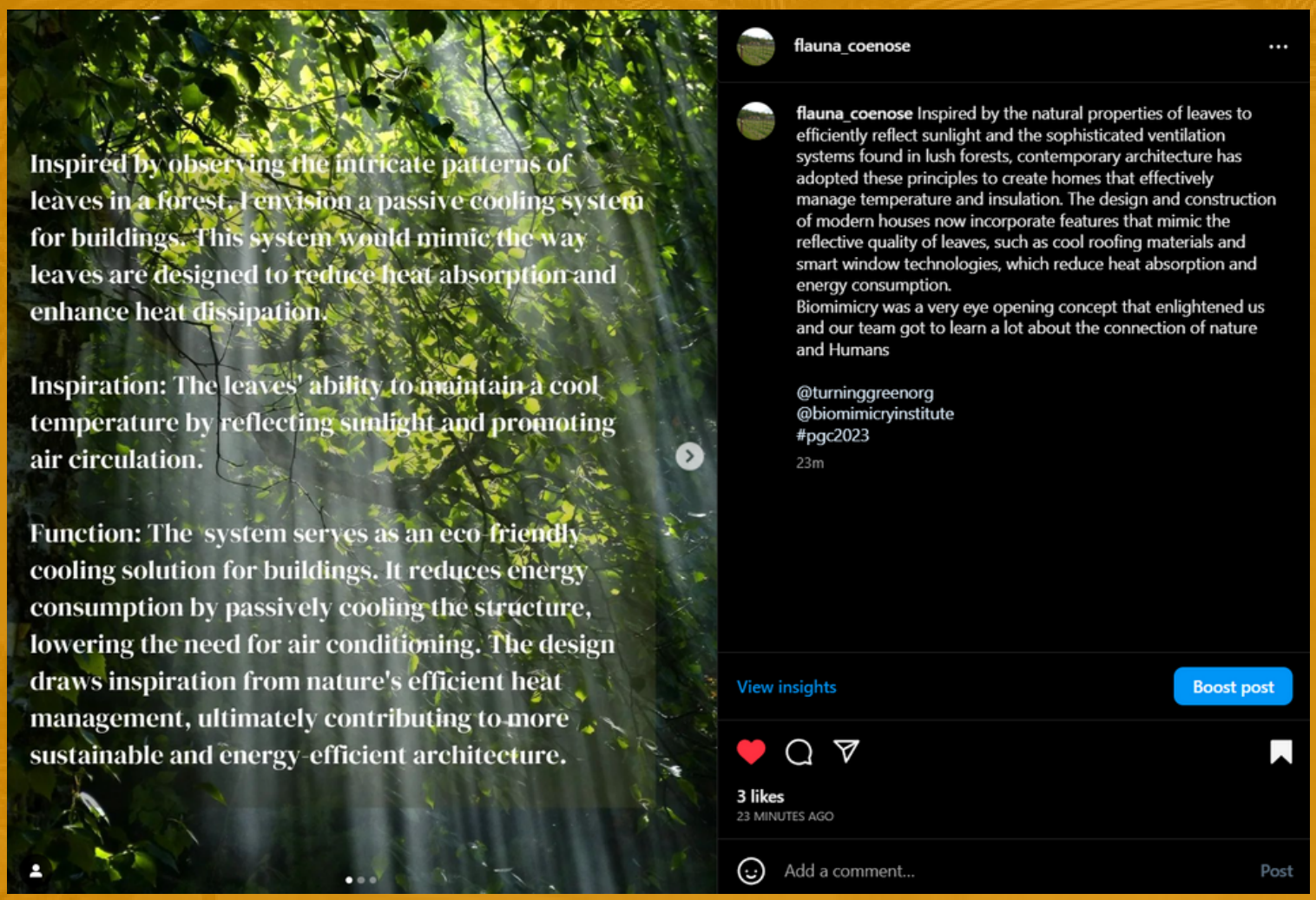
Translate: How does nature do that function? Nature achieves efficient heat management through the design of leaves, which reflect sunlight and promote air circulation, maintaining a cool temperature.



Discover: What research do you need to do? Investigate the specifics of leaf structures and their ability to reduce heat absorption. Research the principles of natural convection and heat dissipation in leaves.

Emulate and Evaluate: Test it out! Develop a building cooling system inspired by leaf structures, integrating microchannels for airflow, photovoltaic cells for energy harnessing, and a smart control system. Measure its effectiveness in reducing energy consumption and cooling buildings.

Advantages of the design include energy efficiency, sustainability, and reduced reliance on air conditioning, aligning with nature's wisdom to create a more environmentally friendly built environment.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flauna_coenose
flauna_coenose Inspired by the natural properties of leaves to efficiently reflect sunlight and the sophisticated ventilation systems found in lush forests, contemporary architecture has adopted these principles to create homes that effectively manage temperature and insulation. The design and construction of modern houses now incorporate features that mimic the reflective quality of leaves, such as cool roofing materials and smart window technologies, which reduce heat absorption and energy consumption.
Biomimicry was a very eye opening concept that enlightened us and our team got to learn a lot about the connection of nature and Humans
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