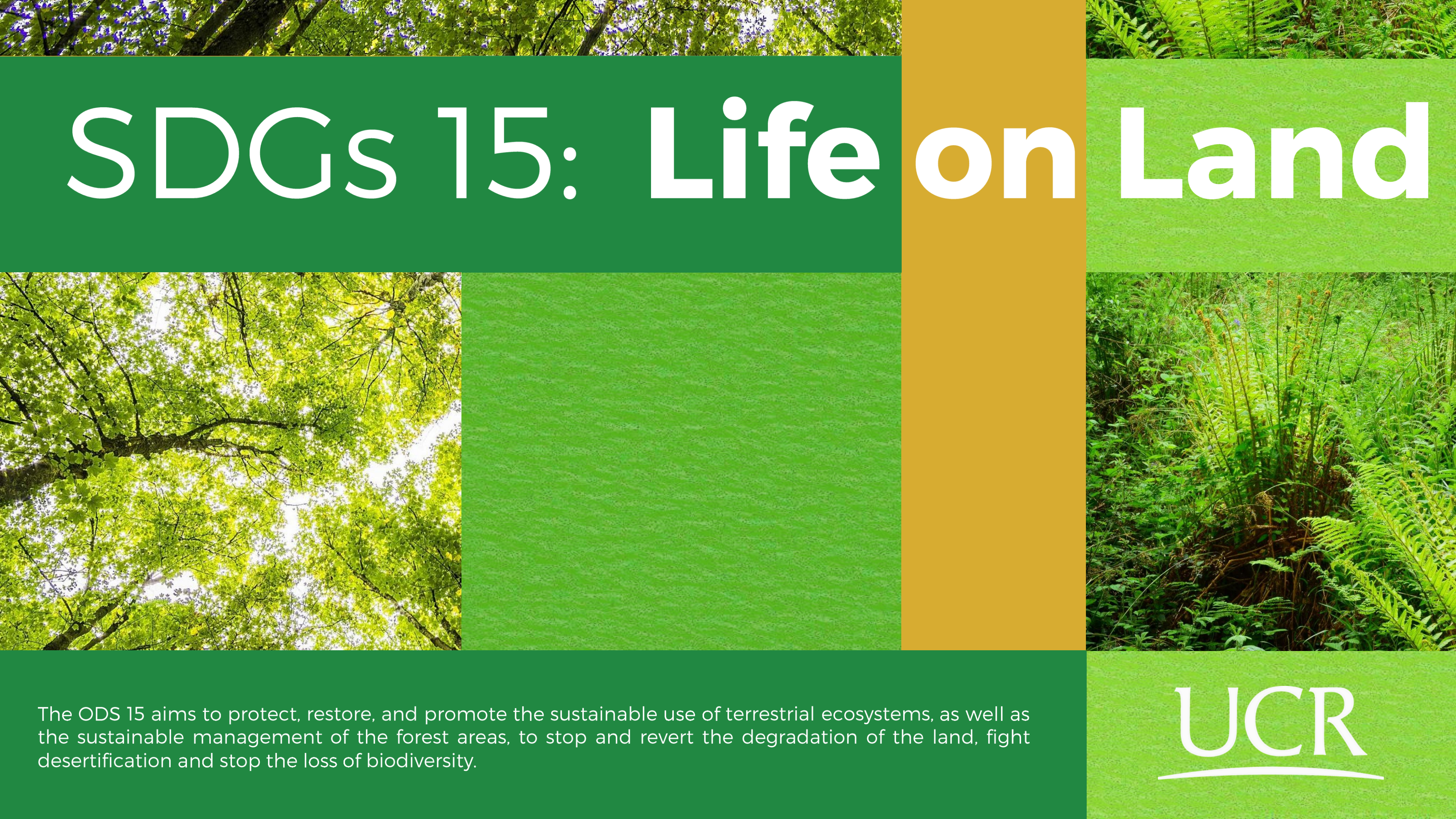
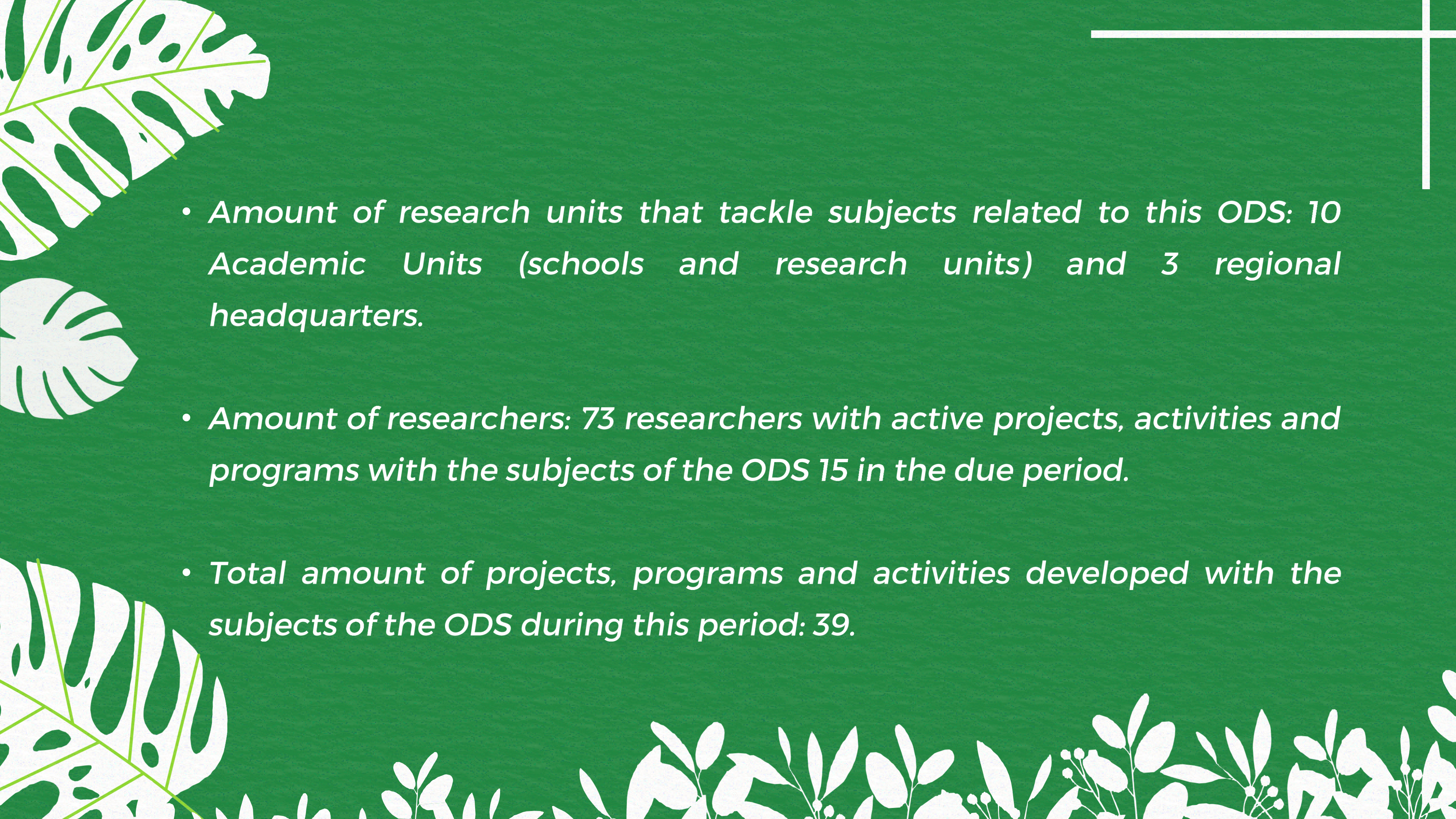




SDGs 15: Life on Land

The ODS 15 aims to protect, restore, and promote the sustainable use of terrestrial ecosystems, as well as the sustainable management of the forest areas, to stop and revert the degradation of the land, fight desertification and stop the loss of biodiversity.

UCR

- 
- Amount of research units that tackle subjects related to this ODS: 10 Academic Units (schools and research units) and 3 regional headquarters.
 - Amount of researchers: 73 researchers with active projects, activities and programs with the subjects of the ODS 15 in the due period.
 - Total amount of projects, programs and activities developed with the subjects of the ODS during this period: 39.



Research Opportunities

Agrifood, textiles and energy systems.

The use of biotechnology aids in the betterment of agriculture, and the fight against hunger and malnourishment.

Forest management under sustainable criteria is possible, and represents a productive conservation alternative in the midst of other destructive practices and uses of forest resources. In altered environments, even with degradation processes started, restoration from the establishment of forest plantations under the models of “silviculture close to the natural” or “new generation planted forests” can be part of the effort to promote a net zero deforestation.

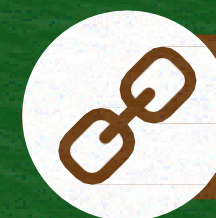


[More Pymes](#)



DIPROVID TECHNOLOGIES

More information: info.proinnova@ucr.ac.cr



[Visit web page](#)



DIPROVID TECHNOLOGIES

IYOKE

This game was created as a gamified resource, with models, dynamics, mechanics and elements native to gaming, with the purpose of transmitting a message, a series of contents or possibly changing behaviors, through a fun experience that encourages motivation, for the teaching of environmental education in children and young students.





LOISIC 

Devices for geophysics measuring and risk prediction; cloudiness and precipitation measuring, satellite receptor, internal measuring of environmental conditions.

DIPROVID TECHNOLOGIES



Fertirriego IOT

an App that supports
fertirriego practices

Virtual Wood Xylotheque

Promotes a rational
use of forest resources



Bioles

Organic fertilizers



Green Pavements

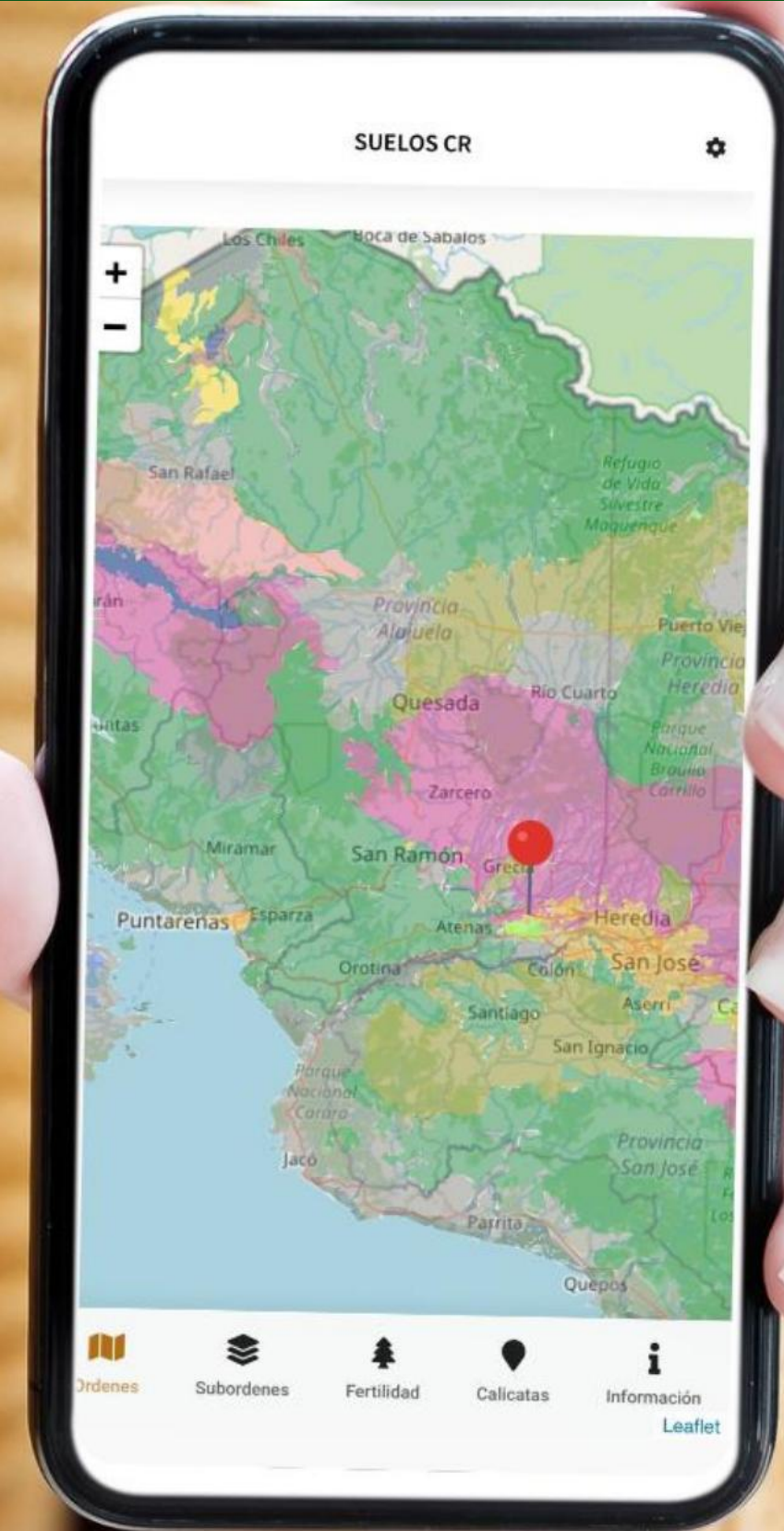
an asphalt mix based
on biopolymers

DIPROVID TECHNOLOGIES

Grounds CR



A tool that makes information on the classifications of the soil in every area of Costa Rica accessible for the agriculture sector, as well as the soil's fertility rate by canton in an easy way that is free of cost.



DIPROVID TECHNOLOGIES



*Natural cosmetics with
sustainable use of
agricultural supplies*





DIPROVID TECHNOLOGIES

Mobile app of grass in Costa Rica.

Smart greenhouses

Estate "finca" Architecture

Biofuel and additive.

"Biopulpeo"

Fiber windMill



*Water purification
process* 

*Constrictive system
based on recycled
plastic blocks* 



The background of the slide is a solid light green color. It is decorated with several stylized tropical leaves. On the left side, there are large, solid green leaves with white outlines and cutouts, including a prominent monstera leaf. On the right side, there are white line-art outlines of tropical leaves, including a large monstera leaf and a palm frond. The text "RESEARCHER'S PROFILES" is centered in the lower half of the slide in a white, bold, sans-serif font.

RESEARCHER'S PROFILES

Licda. Rebeca Rojas Alfaro

Biotechnology

rebeca.rojas.alfaro@gmail.com

Topics of research:

Biotechnology, molecular biology, environmental microbiology, social action with coastal communities, rural tourism, citizen science, bioluminescence



Publications and links of interest:

https://www.scielo.sa.cr/scielo.php?script=sci_arttext&pid=S0034-77442020000500213

- <https://www.redalyc.org/journal/4759/475952089009/475952089009.pdf>
- <https://vinv.ucr.ac.cr/es/recursos/en-la-academia>
- https://www.academia.edu/44556374/Proyecto_de_ciencia_ciudadana_bioluminiscencia_Costa_Rica
- https://concienciafeministacr.wordpress.com/2019/07/16/cientificas-ticas-rebeca-rojas-alfarofbclid=IwAR3Trvpx3EfrsRE_HTBu5ttp8OFrWPYLuYNBqJAdJ3gsG-3kbZ4uYFNkb28

Dra. Ana María Durán Quesada

School of Physics and Research Center for Environmental Pollution

ana.duranquesada@ucr.ac.cr

Topics of research:

Climate variability and change, climate extremes, climate action, greenhouse gases emissions, water cycle, climate modeling.



Publications and links of interest:

<https://doi.org/10.1029/2023GL104159>

<https://doi.org/10.1002/hyp.15027>

<https://doi.org/10.1002/hyp.14884>

<https://doi.org/10.1038/s43017-021-00181-9>

<https://doi.org/10.3390/f12070889>

<https://doi.org/10.1002/hyp.14153>

<https://doi.org/10.1007/s00382-020-05611-w>

<https://doi.org/10.1175/BAMS-D-17-0329.A>

<https://doi.org/10.1038/s41467-019-12062-3>

<https://doi.org/10.1002/hyp.11088>

<https://doi.org/10.1007/s00382-018-4381-2>

<https://doi.org/10.1016/j.earscirev.2019.103070>

Dr. Christian Birkel

Geography

christian.birkel@ucr.ac.cr

Topics of research:

Hydrology, Global Change, Risk

Christian's research broadly focuses on catchment hydrology and the measurement and modelling of streamflow generation and biogeochemical processes. His basic aim is to better understand catchment functioning and the great variability of hydrological behaviors across different temporal and spatial scales. Special interest in his research play isotope tracers and their incorporation into modelling. Insights from this research can be applied to assess the impacts of stream regulation and environmental change on the quality and quantity of surface and groundwaters in a context of global changes, food, energy, biodiversity, and water security issues.



[Publications and links of interest:](#)

Dra. Kenia Barrantes Jiménez

Health Research Institute (INISA)

kenia.barrantes@ucr.ac.cr

Topics of research:

Antimicrobial resistance, water pollution



[Publications and links of interest](#)

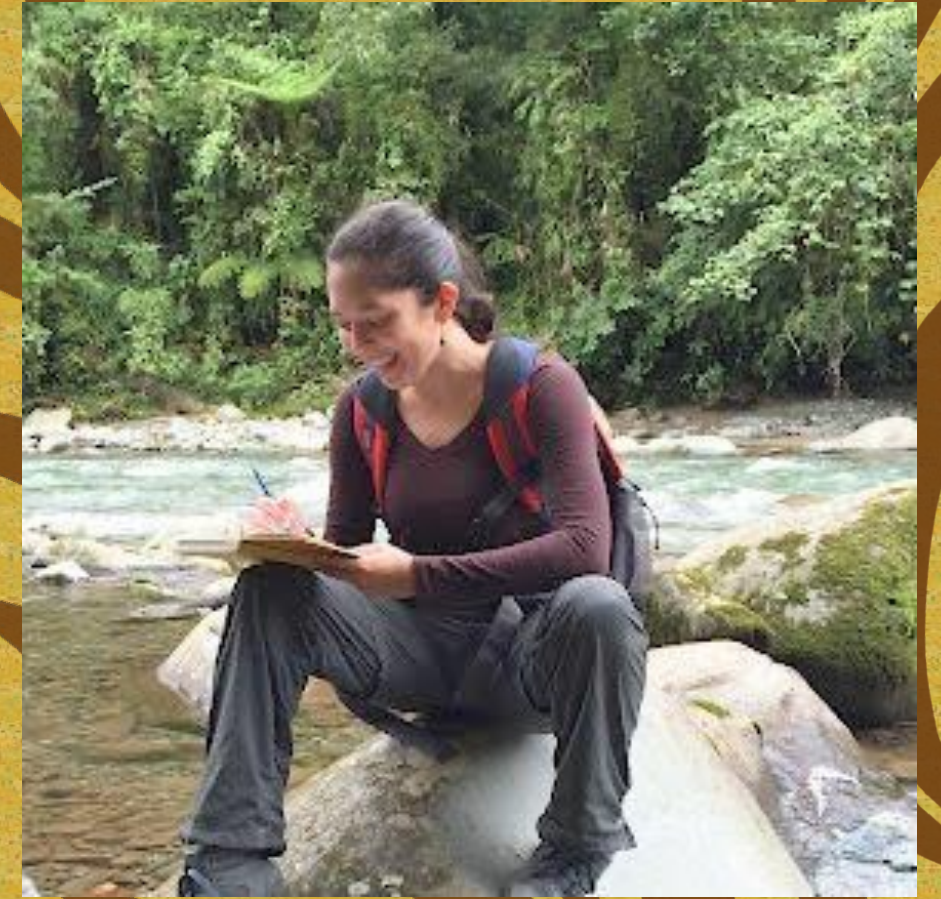
MAG. Melania Fernández Campos

Lankester Botanical Garden

melania.fernandez@ucr.ac.cr

Topics of research:

Plant ecology, taxonomy and biogeography. Particularly interested in plant-microbial symbiosis, and plant conservation through reintroduction and biogeographical analyses.



[Publications and links of interest](#)

Dr. Alfredo Cascante-Marín

School of Biology

alfredo.cascante@ucr.ac.cr

Topics of research:

Plant reproduction, pollination, genetics, Bromeliaceae, Paramos



Publications and links of interest:

<https://doi.org/10.1093/aobpla/plae011>

<https://doi.org/10.7717/peerj.14445>

<https://doi.org/10.1093/botlinnean/boz083>

<https://doi.org/10.1371/journal.pone.0295258>

Dr. Adrián A. Pinto Tomás

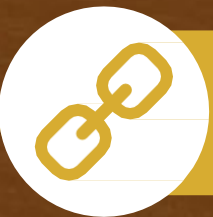
Center for Research in Cell and Molecular Biology (CIBCM)

adrian.pinto@ucr.ac.cr

Topics of research:

Microbial Ecology, Host-Microbe Symbioses, Bioprospecting, Biocontrol.



 Publications and links of interest

Dr. Gerardo Avalos

School of Biology UCR

gerardo.avalos@ucr.ac.cr

Topics of research:

Ecology of palms, functional ecology of hummingbirds, multivariate statistics.



[Publications and links of interest](#)

Dr. Marco D. Barquero

Sede del Caribe

marco.barquero_a@ucr.ac.cr

Topics of research:

Zoology, Ecology, Conservation, Tourism



Publications and links of interest



Dra. María José Rodríguez Vásquez

Biosystems Engineering School
maria.rodriguez_vasq@ucr.ac.cr

Topics of research:

Life cycle assesment



Publications and links of interest

Dra. Ana Margarita Silva Benavides

Biology Faculty and CIMAR

ana.silva@ucr.ac.cr

Topics of research:

Mangrove, microalgae from soil and acuatic environment



Publications and links of interest

<http://dx.doi.org/10.15517/rbt.v63i1.23103>

https://doi.org/10.1007/978-1-4020-8278-8_7

<https://doi.org/10.3390/en14217170>

<https://doi.org/10.3390/pr9050820>





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Actividades

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