Most important topics within the working group:

- Bioeconomy
- Biomolecules in health, diseases and environment

Expertise of the individual groups:

- Bioeconomy/Phenotyping
- Plant physiology
- Food Security
- Food Science and Health/Valorization of waste material
- Proteomics
- Molecular Mechanisms of Natural Compounds
- Natural extracts in skin diseases (cytotoxicity)
- Microbial pathogenesis, immunology, biotechnology and viral diseases

Present activities and funding options:

- Food Security Center (Hohenheim)
- Structural characterization of novel proteins
- Bioeconomy
- Exchange of Ph.D., M.Sc. and Diploma students (Hohenheim, Stuttgart and Freiburg, Osnabrück)
- Cooperation funded by DAAD, Baden-Württemberg Foundation, Alexander von Humboldt Foundation, fiat panis Foundation, etc.

Future activities:

- Continuing ongoing projects (bioeconomy, food security)
- Research on palm oil.
- Exchange of methods for virology studies (UCR/UNA/Bonn)
- Influence of stress on physiological responses in tropical environments
- Influence of bioextracts on plant development and root formation of crop and ornamental plants

Suggestions and perspectives:

- Projects co-funded by DFG and CONARE
- Explore funding possibilities by BMBF
- Cooperations with MPI
- International Ph.D. sandwich program
- Postdoc positions at Costa Ricans universities
- Establishment of core facilities of modern imaging techniques and proteomics
- International graduate school (life sciences)
- EU, Marie Courie, Eranet, additional funding possibilities

Possible combined projects:

- Food and biomolecules from plants and microorganisms for health
- Insects and microorganisms interactions with plants and the human immune system

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