

The Horticulture Competence Centre **KoGa (Kompetenzzentrum Gartenbau)** is a cooperation of its four support organizations, the University of Bonn (**Uni Bonn**), Jülich Research Centre (**FZJ**), the Federal State of Rhineland-Palatinate (represented by the Service Centre for Rural Areas Rheinpfalz, **DLR-RP**) and the Chamber of Agriculture North Rhine-Westphalia (**LWK-NRW**). The virtual centre serves as a bridge between practice and science through:

- Information exchange between the partners
- Joint projects
- Communication with science and practice.

KoGa-relevant core competencies of its four partners:

Uni Bonn: Basic and applied research in agriculture and horticulture with a focus on stress physiology, product and process quality and nutrition science; tertiary education.

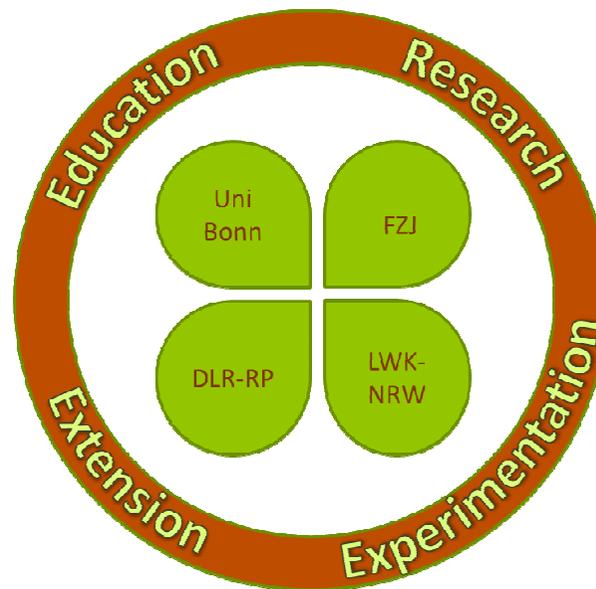
FZJ: Basic and applied research on plant physiology, phenotyping (sensors, technology and application) and sustainable bio-economy.

DLR-RP: Practical experimentation on pome and stonefruit; extension, training.

LWK-NRW: Practical experimentation on vegetables, berry fruit, ornamentals; tree nursery; extension, training.

KoGa's focus groups are, amongst others: producers, consumers, extension officers, scientists, political decision makers, trainers and students.

The long-term goal of KoGa is to secure and support the performance and competitive capability of research, training and education in the field of horticulture, as well as the development, optimization and provision of new technologies and processes for horticultural practitioners. KoGa thus serves as integrated platform for inter- and transdisciplinary activities and opens up the potential of the resources for horticultural research and knowledge transfer that are provided by its partners.



Further, KoGa has the following tasks and goals:

- Identification of priority horticultural research questions and providing support in recruiting interdisciplinary working groups to carry out research.
- Acquisition of financial resources for joint research projects.

- Optimization of production and post-harvest processes and the development of new insights for the horticultural practice.
- Education, training and learning functions.
- Enrichment of under- and post-graduate training by facilitating the interaction with interdisciplinary research and project groups.
- Supporting the communication of ongoing horticultural research activities and public relations.
- Facilitation of a rapid transfer of research results to focus groups and institutions



Since its foundation in 2002, KoGa has provided important contributions, through, amongst others, the participation of its partners in numerous short- and medium-term projects, such as:

Vegetables

- Experiences with organic production of artichokes

Herbs and spices

- Guidelines on pests and diseases of medicinal and spice plants
- Yield of *Stevia rebaudiana* under long-day conditions
- AgroHort med – Yield optimization of medicinal plants grown in novel greenhouses with high transparency and natural UV radiation

Pome fruit

- Marker-Trait combination in apple hybrids
- Influence of recent and future climate change on pome fruit
- Evaluation of new pruning and training systems
- Optimization of production technology for organic horticulture
- Assessment and increase of biodiversity in perennial crops
- Innovative concepts for residue-free apple production

Product quality

- „Frucht macht Schule“: Innovative marketing strategies for school and group feeding
- Influence of management and storage conditions on the allergenic potential in apple
- Influence of different storage procedures on nutritious ingredients in apple
- Effect of cultivation under plastic cover on early ripening and quality of sweet cherry

Rootstock

- Performance tests of new rootstocks, cultivars and mutants
- Evaluation of GiSela® clonal rootstocks in sweet cherry
- Evaluation of apple rootstock for their reaction against various yield-endangering diseases
- Production of pathogen-free mother plants for the multiplication of tree- and berry fruit

Process Engineering

- Avoidance of late frost damage in pome fruit through use of new management processes
- Mechanization in pome fruit production
- Hail protection systems – techniques and influence on yield
- Non-invasive techniques to measure vegetable, medicinal and fruit crops

KoGa – that is the staff of its four partner organizations, who carry out horticulturally relevant activities. KoGa thrives on joint research projects, practical demonstrations and interactions that are carried out together with additional partners from horticultural science, education and practice.

For further information about KoGa and opportunities for collaboration, please contact our co-ordinator, Dr. Hannah Jaenicke. Tel.: +49-2225-9808735, Email: h.jaenicke@ko-ga.eu, Web: www.ko-ga.eu. The KoGa co-ordination office is located at DLR-RP, Campus Klein-Altendorf 2, 53359 Rheinbach, Germany.



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