

LIST OF PUBLICATIONS FROM THE PROJECT P-28522

Clemens Vergeiner and Bernhard Kräutler

Blue Fluorescent Chlorophyll Catabolites from Banana Leaves Hypermodified with Terpenoidic Groups Related to Absciscic Acid

Helvetica Chimica Acta **2025**, e202500042 <https://doi.org/10.1002/hlca.202500042>

Theresia Erhart; Christian Nadegger; Stefan Vergeiner; Christoph Kreutz; Thomas Müller; Bernhard Kräutler

Novel Types of Phyllobilins in a Fern - Molecular Reporters of the Evolution of Chlorophyll Breakdown in the Paleozoic Era

Chem. Eur. J. 2024, e202401288 <https://doi.org/10.1002/chem.202401288>

Chengjie Li, Bernhard Kräutler

Facile Retro-Dieckmann Cleavage of a Pink Phyllobilin – New Type of Potential Chemical Downstream Steps of Natural Chlorophyll Breakdown

Chemical Monthly (Monatshefte der Chemie) 154, 1359-1368 (2023)

<https://doi.org/10.1007/s00706-022-02894-z>

Cornelia A. Karg, Lucia Parrakova, Dietmar Fuchs, Harald Schennach, Bernhard Kräutler, Simone Moser and Johanna M. Gostner

A Chlorophyll-Derived Phylloxanthobilin is a Potent Antioxidant that Modulates Immunometabolism in Human PBMC

Antioxidants 11, 2056 (2022) <https://doi.org/10.3390/antiox11102056>

Chengjie Li, Maren Podewitz and Bernhard Kräutler

A Blue Zinc-Complex of a Dioxobilin-Type Pink Chlorophyll Catabolite Exhibiting Bright Chelation-Enhanced Red Fluorescence

Europ. J. Inorg. Chem. 20, 1904-1912 (2021)

<https://doi.org/10.1002/ejic.202100206>

Sylvain Aubry, Bastien Christ, Bernhard Kräutler, Enrico Martinoia, Howard Thomas, Cyril Zipfel

An ever-green mind and a heart for the colors of fall (Obituary Stefan Hörtensteiner)

J. Exp. Botany, 72, 4625–4633 (2021) <https://doi.org/10.1093/jxb/erab162>

Simone Moser, Theresia Erhart and Bernhard Kräutler

Phyllobilins from senescence associated chlorophyll breakdown in leaves of basil (*Ocimum basilicum*) show increased abundance upon herbivore attack

J. Agr. Food Chem. 68, 7132-7142 (2020) <https://doi.org/10.1021/acs.jafc.0c02238>

Steffen Jockusch and Bernhard Kräutler

The Red Chlorophyll Catabolite (RCC) is an Inefficient Sensitizer of Singlet Oxygen - Photochemical Studies of the Methyl Ester of RCC.

Photochem Photobiol. Sci. 19, 668-673 (2020) <http://dx.doi.org/10.1039/D0PP00071J>

Simone Moser and Bernhard Kräutler

In Search of Bioactivity – Phyllobilins, an Unexplored Class of Abundant Heterocyclic Plant Metabolites from Breakdown of Chlorophyll

Israel J. Chem. 59, 420 – 431 (2019)

<https://onlinelibrary.wiley.com/doi/abs/10.1002/ijch.201900012>

Iris Süßenbacher, Damian Menghini, Gerhard Scherzer, Kathrin Salinger, Theresia Erhart, Simone Moser, Clemens Vergeiner, Stefan Hörtensteiner and Bernhard Kräutler

Cryptic Chlorophyll Breakdown in Non-Senescent Green *Arabidopsis thaliana* Leaves

Photosynthesis Research, **142**, 69-85 (2019) <https://doi.org/10.1007/s11120-019-00649-2>

Stefan Hörtensteiner, Mareike Hauenstein and Bernhard Kräutler

Chlorophyll Breakdown - Regulation, Biochemistry and Phyllobilins as its Products, in Metabolism, Structure and Function of Plant Tetrapyrroles (B. Grimm, ed.)

Advances in Botanical Research **90**, 213-271 (2019)

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Monatshefte der Chemie (Chemical Monthly) **2019**, 150, 813-820

<https://doi.org/10.1007/s00706-019-02396-5>

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Bernhard Kräutler, Thomas Müller and Steffen Jockusch

Comment on A. Tiessen “The fluorescent blue glow of banana fruits is not due to symplasmic plastidial catabolism but arises from insoluble phenols esterified to the cell wall”

Plant Science **2019**, 280, 461-462 <https://doi.org/10.1016/j.plantsci.2018.12.004>

Chengjie Li, Theresia Erhart, Xiujun Liu and Bernhard Kräutler

Yellow Dioxobilin-Type Tetrapyrroles from Chlorophyll Breakdown in Higher Plants - A New Class of Colored Phyllobilins

Chem. Europ. J. **2019**, 25, 4052-4057

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B. Kräutler

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Bernhard Kräutler

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Senescent Leaves of Grapevine (*Vitis vinifera*)

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Pyro-Phyllobilins – Elusive Chlorophyll Catabolites Lacking a Critical Carboxylate Function of
the Natural Chlorophylls

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Maren Podewitz, Klaus R. Liedl, Bernhard Kräutler

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Chiral Photoswitches

Angew. Chem. Int. Ed. **2016**, 55, 15760-15765 <https://doi.org/10.1002/anie.201609481>

T. Erhart, C. Mittelberger, C. Vergeiner, G. Scherzer, B. Holzner,

P. Robatscher, M. Oberhuber, B. Kräutler

Chlorophyll catabolites in Senescent Leaves of the Plum Tree (*Prunus domestica*)

Chem. & Biodiv. **2016**, 13, 1441-1453 <https://doi.org/10.1002/cbdv.201600181>

M. Scherl, T. Müller, C. R. Kreutz, R. G. Huber, E. Zass, K. R. Liedl, B. Kräutler
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