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# **Biofortification of Crops**

Guest Editors:

Dr. Erik Alexandersson

## Message from the Guest Editors

Dr. Laura Jaakola

Dr. Massimiliano D'Imperio

Dr. Francesco Di Gioia

Dr. Elizabeth Parkes

Deadline for manuscript submissions: closed (1 October 2019) Dear Colleagues,

Dietary diversification by supplementation or biofortification of staple foods are complementary approaches that can be used in addressing potential micronutrient deficiency. Bioforticiation, e.g., by breeding of preferred varieties to increase nutrient content, has the advantage that it provides the farmer and consumer with a ready-to-eat product.

It can be done by classical breeding; however, a major challenge is that this is a lengthy process based on the recurrent selection of phenotypes. In the future, approaches should therefore consider marker-assisted breeding strategies as well as gene editing to increase the levels of micronutrients. Both these ways require an advanced genetic and molecular understanding of the *in planta* biosynthesis of nutrients. Finally, possible secondary effects such as altered content of "off-target" compounds, effects during post-harvest including longterm storage of produce, as well as the bioavilablility of the nutrient in the bioifortified crop need to be considered.

Dr. Erik Alexandersson *Guest Editor* 









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# **Editor-in-Chief**

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## Message from the Editor-in-Chief

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