# Article information:

Determining factors, regulation system, and domestication of anthocyanin biosynthesis in rice leaves - Zheng - 2019 - New Phytologist - Wiley Online Library  
<https://nph.onlinelibrary.wiley.com/doi/10.1111/nph.15807>

# Article summary:

1. Flavonoids are a large group of secondary metabolites in plants with multiple functions, such as attracting pollinators and protecting against biotic or abiotic stresses.

2. Three transcription factor families (R2R3-MYB, bHLH, and WDR) regulate different branches of flavonoid biosynthesis by activating a subset of biosynthetic genes.

5. In rice, five putative anthocyanin biosynthesis regulators have been identified, including four bHLH genes and the R2R3-MYB gene OsC1.

# Article rating:

May be slightly imbalanced: The article presents the information in a generally reliable way, but there are minor points of consideration that could be explored further or claims that are not fully backed by appropriate evidence. Some perspectives may also be omitted, and you are encouraged to use the research topics section to explore the topic further.

# Article analysis:

The article is generally reliable and trustworthy in its presentation of the research findings on the regulation system and domestication of anthocyanin biosynthesis in rice leaves. The article provides an overview of the relevant literature on flavonoid biosynthesis, as well as a detailed description of the regulatory genes involved in anthocyanin biosynthesis in rice. The authors also provide evidence for their claims from previous studies conducted on Arabidopsis thaliana, maize, and Oryza sativa.

However, there are some potential biases that should be noted when considering this article's trustworthiness and reliability. For example, the authors do not explore any counterarguments to their claims or present any opposing views on the topic. Additionally, they do not discuss any possible risks associated with their findings or provide any evidence for their claims beyond citing previous studies. Furthermore, they do not present both sides of the argument equally; instead they focus primarily on supporting their own conclusions without providing an equal amount of attention to other perspectives or arguments that may exist within this field of research.

# Topics for further research:

* Anthocyanin biosynthesis regulation
* Anthocyanin biosynthesis in rice
* Flavonoid biosynthesis
* Regulation of flavonoid biosynthesis
* Anthocyanin biosynthesis in Arabidopsis thaliana
* Anthocyanin biosynthesis in maize

# Report location:

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