Innovative Approaches to Polyphenol Synthesis: Combinatorial Biosynthesis Unveiled

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Polyphenols Biological Activities

- Antioxidant
- Anti-inflammatory
- Anticancer
- Would healing
- Anti-viral
- Anti-septic
- Skin treatment disorders
- Anti-aging
- Anti-diabetic
- Estrogenic
- Menopause treatment
- Cholesterol lowering...

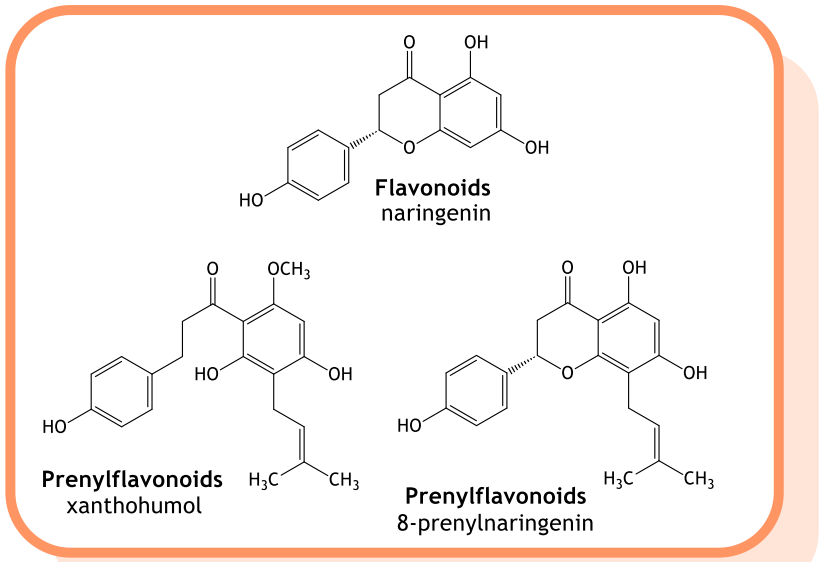
$3.3 billion by 2032

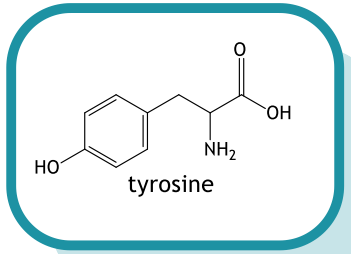
Extraction from Plants & Chemical Synthesis

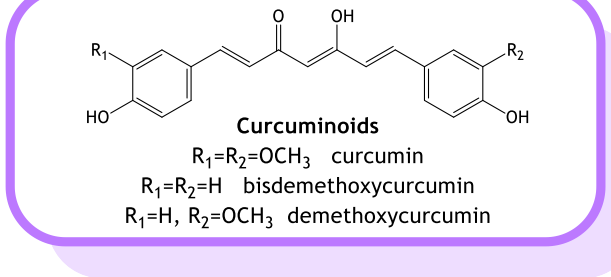
- Low amounts/yields/purity
- Limited by seasonality/ regional variations/pests/ extreme weather
- High land/water investment
- Environmentally unfriendly
- Expensive downstream processes
- Complex

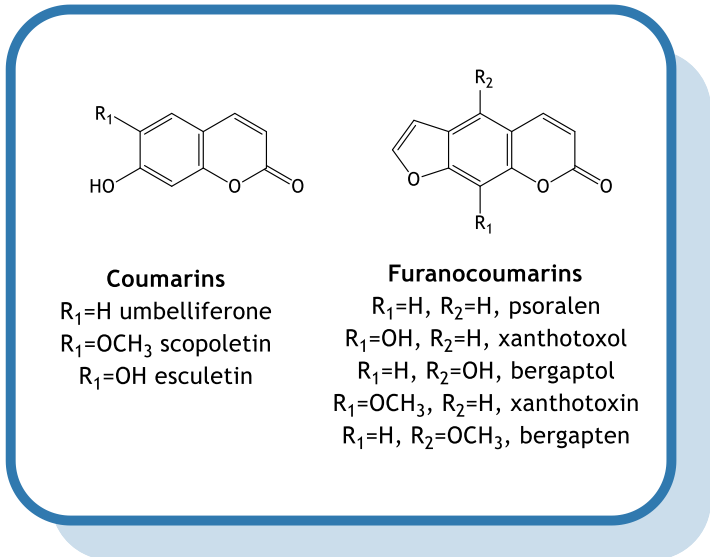
Heterologous Production & Synthetic Biology

- Growth in inexpensive substrates
- Rapid production cycles
- Higher purity
- Higher amounts
- Cheaper
- Sustainable
- Not limited by seasonality









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