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Nota di contenuto	About the Guest Editor V -- Preface to "Potential Neuromodulatory Profile of Phytocompounds in Brain Disorders" VII -- Editorial: Special Issue "Potential Neuromodulatory Profile of Phytocompounds in Brain Disorders" -- Antidepressant Potential of Chlorogenic Acid-Enriched Extract from Eucommia ulmoides Oliver Bark with Neuron Protection and Promotion of Serotonin Release through Enhancing Synapsin I Expression -- Natural Phytochemicals in the Treatment and Prevention of Dementia: An Overview -- 3,5,6,7,8,3',4'-Heptamethoxyflavone, a Citrus Flavonoid, Ameliorates Corticosterone-Induced Depression-like Behavior and Restores Brain-Derived Neurotrophic Factor Expression, Neurogenesis, and Neuroplasticity in the Hippocampus -- Protective Effects of Costunolide against Hydrogen Peroxide-Induced Injury in PC12 Cells -- Extracts from Traditional Chinese Medicinal Plants Inhibit Acetylcholinesterase, a Known Alzheimer's Disease Target -- Curcumin and Resveratrol in the Management of Cognitive Disorders: What is the Clinical Evidence? -- Therapeutic Effects of Phytochemicals and Medicinal Herbs on Chemotherapy-Induced Peripheral Neuropathy -- The Suppressive Effects of Cinnamomi Cortex and Its Phytocompound Coumarin on Oxaliplatin- Induced Neuropathic Cold Allodynia in Rats -- The Anticonvulsant Activity of a Flavonoid-Rich Extract from Orange Juice Involves both NMDA and GABA-Benzodiazepine Receptor Complexes -- Chlorella sorokiniana Extract Improves Short-Term Memory in Rats -- Neurodegenerative Diseases: Might Citrus

Flavonoids Play a Protective Role?.

Sommario/riassunto

Natural and chemical compounds, often used as both dietary supplements and alternative medicines, are characterized by specific chemical properties, allowing their passage across the blood brain barrier with consequent specific effects on neurotransmission. In particular, several natural compounds have shown beneficial properties in the treatment of neuropsychiatric disorders, especially cognitive impairment and mood disorders, contributing to the maintenance of the physiological brain functioning by interacting with different receptors, transcription factors and signal transduction pathways. Neuroinflammation and oxidative stress have also been proposed as crucial contributors to brain dysfunction development, thus recent investigations have focused on novel therapeutic approaches based on the use of phytoderivates with neuroprotective properties. Thus, this Special Issue includes a collection of 11 papers, describing key findings for the identification of molecular mechanisms required for the development of potential and promising natural therapeutics for the treatment of psychiatric and neurodegenerative disorders.