

Impact of Plant-Derived Flavonoids on Neurodegenerative Diseases

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© 2016, Springer Science+Business Media New York. Neurodegenerative disorders have a common characteristic that is the involvement of different cell types, typically the reactivity of astrocytes and microglia, characterizing gliosis, which in turn contributes to the neuronal dysfunction and or death. Flavonoids are secondary metabolites of plant origin widely investigated at present and represent one of the most important and diversified among natural products phenolic groups. Several biological activities are attributed to this class of polyphenols, such as antitumor activity, antioxidant, antiviral, and anti-inflammatory, among others, which give significant pharmacological importance. Our group have observed that flavonoids derived from Brazilian plants *Dimorphandra mollis* Bent., *Croton betulaster* Müll. Arg., e *Poincianella pyramidalis* Tul., botanical synonymous *Caesalpinia pyramidalis* Tul. also elicit a broad spectrum of responses in astrocytes and neurons in culture as activation o