

This occasional section within the journal surveys visions and achievements, often not on the main track of the developing biomedical sciences, but all relating to discoveries and developments of medicinal – both ancient and modern. What they have in common, in one way or another, is providing further background and glances around the edges of the core discipline of pharmacognosy, as it has been and continues to evolve within our times.

Rosella (*Hibiscus sabdariffa* L.) Tea may Protect against Alzheimer's Disease

Ian E Cock¹,2,*

¹School of Environment and Science, Nathan Campus, Griffith University, Brisbane, Queensland, AUSTRALIA.
²Centre for Planetary Health and Food Security, Nathan Campus, Griffith University, Nathan, Brisbane, Queensland, AUSTRALIA.

Correspondence:

Dr. Ian E Cock^{1,2}

¹School of Environment and Science, Nathan Campus, Griffith University, 170 Kessels Rd, Nathan, Brisbane, Queensland 4111, AUSTRALIA. ²Centre for Planetary Health and Food Security, Nathan Campus, Griffith University, 170 Kessels Rd, Nathan, Brisbane, Queensland 4111, AUSTRALIA. Email id: i.cock@griffith.edu.au

A recent study from a Pohang University, Korea group has reported that the hydroflavone gossypeptin, which is found in relative abundance in *Hibiscus sabdariffa* L., has therapeutic effects in a 5XFAD Alzheimer's Disease (AD) mouse model. That mouse strain possesses human APP and PSEN1 transgenes, which are linked to familial AD and are known to enhance β -amyloid protein accumulation in brain cells. Mice treated with gossypeptin displayed significantly decreased cognitive impairment similar to those caused by AD. The cognitive improvement was associated with substantially decreased in β -amyloid aggregates in brain

cells. Furthermore, the authors demonstrated that gossypeptin prevented the activation of genes associated with chronic inflammation and facilitated β -amyloid clearance from microglial cells. Further studies are required to confirm the findings and to determine the bioavailability of gossypeptin.

REFERENCE

 Kyung Won Jo, Dohyun Lee, Dong Gon Cha, et al. Gossypetin ameliorates 5xFAD spatial learning and memory through enhanced phagocytosis against Aβ. Alzheimer's Research and Therapy. 2022;14(1). DOI:10.1186/s13195-022-01096-3





DOI: 10.5530/pc.2023.1.7

Copyright Information :

Copyright Author (s) 2023 Distributed under Creative Commons CC-BY 4.0

 $\textbf{Publishing Partner:} \ EManuscript \ Tech. \ [www.emanuscript.in]$