Propolis and its polyphenolic compounds given to mice before irradiation protect mice from the lethal effects of whole-body irradiation.


Propolis and single flavonoids (caffeic acid, chrysin and naringin) given to mice before irradiation protect mice from the lethal effects of whole-body irradiation and diminish primary DNA damage in their white blood cells as detected by the alkaline comet assay.


Pre-treatment with caffeic acid positively modulated all the gamma radiation-induced changes of lymphocytes in vitro.

Devipriya N, Sudheer AR and Menon VP. **Caffeic acid protects human peripheral blood lymphocytes against gamma radiation-induced cellular damage.** 2008 May/June22(3): 175-186.

Water-soluble derivative of propolis, caffeic acid, chrysin and naringin have radio protective abilities comparable to the radio protector AET without genotoxicity. Water-soluble derivative of propolis was found to be the most effective in diminishing the levels of primary and more complex cytogenetic DNA damage in white blood cells.