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Recuperation from Respiratory Virus Infections with Phytochemicals and Derivatives

Arjun Ganguly¹, Nitin Tiwari², Rachana*, Juhi Mathur³, Ashok Tiwari^{4*}

^{1,2}Department of Biotechnology, Bhimtal, Kumaun University, Nainital, Uttarakhand – 203136

^{3,4}Department of Biotechnology, Jaypee Institute of Information Technology, A-10, Sector-62, Noida, Uttar Pradesh - 201309

E-mail: ganguly1998arjun@gmail.com; tiwarinitin163@gmail.com; juhimathur77@gmail.com; ashoka.pareek01@gmail.com

*Corresponding author: rachana.dr@iitbombay.org

Respiratory infections are the major reason for increased outpatient visits and misuse of antibiotics in all age groups from children to adults. Respiratory tract infection is divided into an upper and lower respiratory infections. Upper respiratory infection includes Acute rhinitis, Rhino sinusitis, Acute pharyngitis, Acute epiglottitis, Acute laryngitis, and Acute otitis. Almost all of these are caused by viruses such as: *Influenzae*, *Rhino*, *parainfluenzae*, *Respiratory syncytial virus*, *Enterovirus*, *Adenovirus*, *Epstein bar virus*, Herpes simplex virus etc. Acute bronchitis and community-acquired pneumonia come under lower tract respiratory infection. Herbal and purified natural products open new hopes for antiviral drug development. Plant-based preparations and phyto-constituents are reported to reduce infectious conditions. Essential oils also help to treat viral and non-viral infections. Majority of the natural products we obtain from plants belong to the category of: alkaloids, flavonoids, terpenoids, polysaccharides, lactone and glycosides, etc. Most of them are reported to have immunomodulatory properties. They all enhance immune responses by activating cellular immunity and antibody-dependent cell-mediated lysis. Many natural products have been proven to have the clinical efficacy against respiratory infections. Major benefits of using natural products for these diseases are: low cost, effectiveness, with low or no side effects. This review will draw your attention to the various applications of various phyto-constituents and their derivatives for treating various viral respiratory infection.

Keywords: Respiratory viral infection; Natural products; Phytoconstituents; Immunomodulation

Citation

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