Biochem & Pharmacol 2013, 2:4
http://dx.doi.org/10.4172/2167-0501.S1.004

OMICS Group Conferences
Accelerating Scientific Discovery

International Conference and Exhibition on
Pharmacognosy, Phytochemistry & Natural Products
October 21-23, 2013 Radisson Blu Plaza Hotel, Hyderabad, India

An efficient *in vitro* propagation of sea buckthorn (*Hippophae salicifolia* D. Don) through cotyledonary node explants and assessment of genetic fidelity using RAPD analysis

Mousmi Saikia
Gauhati University, India

An efficient and rapid *in vitro* propagation protocol had been standardized using cotyledonary node explants excised from aseptically germinated seedlings of *Hippophae salicifolia* D. Don. Various nutrient media, antioxidants and different combinations of cytokinins and auxins were assessed and optimized for shoot proliferation. WPM medium with Staba vitamin containing sucrose (30 g l^{-1}), PVP (100 mg l^{-1}), agar (8 g l^{-1}) and growth hormones BAP (0.44 µM), Kn (23.2 µM), IAA (28.5 µM) and GA_3 (0.28 µM) was found to be optimum with 21.6 shoots per explants in 6 weeks of culture and an average of 30.5 shoots per explants in 6 weeks of 1st subculture. Efficient rooting (100%) was achieved in a medium containing IBA (4.9 µM) on half-strength WPM medium. The rooted shoots showed 100% survival after acclimatization in the greenhouse. Random amplified polymorphic DNA (RAPD) fingerprinting profiles had been used to evaluate the genetic stability and clonal fidelity of the *in vitro* regenerated plants. The protocol reported in the present study will be useful in the mass multiplication of *H. salicifolia* for commercial propagation of this valuable medicinal plant.

Biography

Mousmi Saikia is a Research Scholar in the Department of Biotechnology, Gauhati University. She has completed her M.Sc. at the age of 22 years from Gauhati University and currently pursuing her doctoral studies from Gauhati University under the Department of Biotechnology. She has submitted her thesis and will be defending her thesis by December 2013. She has published 2 papers in reputed journals. Her field of interest is herbal science and technology.

Chemical constituents of selected unifloral and polyfloral honeys with antifungal activity

Moussa Ahmed[1], Noureddine Djebli[1], Saad Aissat[1], Abdelmalek Meslem[1] and Baghdad Khiati[2]
[1]Mostaganem University, Algeria
[2]Institute of Veterinary Sciences University Ibn- khaldoun, Algeria

The purpose of the study was to characterize the physicochemical nature of 6 natural honeys, and to evaluate the antifungal activity of honey. Honey samples were collected from different locations of Algeria Republic. Pollen profile, moisture content, ash, electrical conductivity and pH, were the parameters analyzed in each honey sample. The antifungal activity of honey samples were tested by 100% and 50% (w per v) concentration against *Candida albicans* and *Rhodotorula mucilaginosa*, and by the agar well diffusion method and spectrophotometric assay. Ketoconazole 2% and Nystatin (100 U), were used as positive controls. The floral identification of honeys allowed to cluster them, as monofloral and polyfloral honeys. Concerning the physicochemical parameters, all honey samples were found to meet European Legislation (EC Directive 2001/110) for all parameters. The mean values obtained for the physico-chemical parameters were: pH 4.1; 15.31% moisture; 0.24% ash, 0.39 ms cm-1 electrical conductivity and11.95 free acidity. Inhibition zones for *C. albicans* (6 to10 mm) and *R. mucilaginosa* (6 to 20 mm) were observed. Also, the percentage inhibition (%) for *C. albicans* (69.76 to 99.85) and *R. mucilaginosa* (83.03 to 99.77). The antifungal activity of honeys is related to their floral origin, and physicochemical properties constitute a useful resource for the generation of functional foods.