P44 ANTIFUNGAL AND ANTIBACTERIAL ACTIVITIES OF SOME COMPOUNDS FROM MARINE NATURAL PRODUCTS

Luu Van Chinh, Pham Huu Dien, Chau Van Minh

Institute of Natural Products Chemistry, NCNST, Hoang Quoc Viet Road, Cau Giay District, Hanoi, Vietnam

Twelve different derivatives were synthesised from chitin/ chitosan [1, 2, 3]. Their structures have been determined by different physical methods. The bioassay screening on antifungal and antibacterial activities of all these compounds showed that most of them had significant activity and they can inhibite the growth of some fungi and bacterias: E. coli, S. pyogenes, F. oxysporum, P. oryzae, that caused the spoilage of fresh fruits and foods. Furthermore, all of these compounds are non-toxic (LD₅₀>50g/kg) and can be applied for food preservation.

REFERENCES

- 1- Encyclopedia of Polymer Science and Technology, Vol.3, pp 695-703, London-Sydney, 1965.
- Hayes, Ernest R.
 Novel chitosan derivative its preparation and polymer films produced there form.
 Ptn. 265,561 (CL C08B37/08) 04 May 1988 (Canada).
- 3- Partain, Emmett, Malone, III, Brode, George, Lewis, II. Acid decrystallization of aminopolysaccharides and derivatives thereof: Ptn. 87, 07, 618 (CL C08 B37/08) 17 Dec. 1987 (USA).