

Fuzzy Expert System for Early Warning *Septicaemia epizootica*

Achwil Putra Munir¹⁾, Kudang Boro Seminar²⁾ and
Widiyanto Dwi Surya³⁾

¹⁾ Faculty of Agriculture, University of North Sumatera, Indonesia

²⁾ Faculty of Agricultural Technology, Bogor Agricultural University,
Indonesia ³⁾ Faculty of Veterinary Medicine, Bogor Agricultural University,
Indonesia

Abstract

The main objective of this research is to develop an early warning expert system to monitor the critical level of treatment of *Septicaemia Epizootica* in certain areas in Indonesia. The method used to approach the problem domain was limited to vaccination approach method where the early warning information was obtained according to final value of vaccination effectivity score. The system had been designed to utilize multimedia and web technology. The heart of the system is the reasoning engine that implements fuzzy logic to deal with uncertainty in decision making mechanism. The result of this research indicates that the expert system could simply and consistently process the determination of final value of vaccination effectivity score. Even more, by exploiting web and multimedia as user interface technology, the expertise resource could be distributed, learned, and implemented without time and place constraint.

Keywords: *fuzzy logic, expert system, early warning system, Septicaemia epizootica*