ABSTRAK

Hampiran kuartik bagi kebarangkalian liputan untuk rantau keyakinan $100(1 - \alpha)\%$ secara nominal yang berdasarkan nisbah kebolehjadian diterbitkan bagi model tak linear dengan dua parameter. Satu cara dicadangkan untuk mengubahsuaikan rantau keyakinan tersebut. Didapati bahawa setakat penghampiran kuartik adalah mencukupi, kebarangkalian liputan yang sebenarnya bagi rantau keyakinan terubahsuai ialah $1 - \alpha$.

ABSTRACT

The quartic approximation of the coverage probability of the nominally-$100(1 - \alpha)\%$ confidence regions based on likelihood ratio is obtained for a two-parameter nonlinear model. An adjustment of the nominally-$100(1 - \alpha)\%$ confidence regions is proposed. It is shown that, to the extent that quartic approximation is adequate, the actual coverage probability of the adjusted confidence regions can be taken to be $1 - \alpha$.