

计值,以保证试验的成功率;标准差的初始估计对各个参数估计的影响也不大,尽管较小的标准差的初始估计能够得到较好的期望估计值,但是为了保证标准差的估计精度,标准差的初始估计不宜取值太小。

(2) 期望估计是无偏的,对试验方案不敏感,当样本量大于18时不仅能保证较高的试验成功率,而且能得到比较好的期望的估计值,与其它感度试验方法相比,该方法更适用于对没有先验信息的产品进行感度试验。

(3) 标准差的估计是系统偏小,有约2/3偏小,1/3偏大,随着样本量的增加,标准差的估计精度逐步提高,针对标准差的估计系统偏小的问题,应该进行纠偏处理。

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Simulation of Neyer D-Optimal Sensitivity Test

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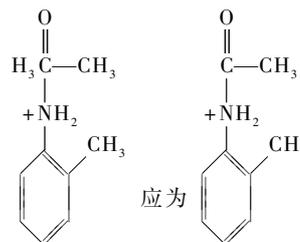
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Abstract: In order to study the characteristics and the influence factors of the parameter estimation of Neyer D-optimal sensitivity test, the effects of the initial guesses of parameters and the sample size on the precision of parameter estimation were studied by computer simulation. Results show that the mean estimation is unbiased; about one-third of the standard deviation estimation is smaller and two-thirds of the standard deviation estimation is bigger; the initial guesses of the parameters have a little effect on the precision of parametric estimation; a better mean estimation can be obtained if sample size is more than 18.

Key words: system engineering; Neyer D-optimal method; sensitivity test; computer simulation

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更正



本刊2009年第1期P5图1中“滤柄”应为“滤饼”,P6中
应为此,特此更正。