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**Abstract** The aim of this paper is to present an interesting application of one of the decision-making methods used in problems with lack of knowledge. This method is called Info-Gap Theory and can be applied to describe the phenomenon where no classic uncertainty description in form of probability density or possibility distribution is at disposal. A general outline of Info-Gap Theory is presented and its functions (robustness and opportuneness) are shown. The numerical example of fertilizer nitrogen requirement is given to illustrate the efficiency of the proposed method to practical issues.

**Keywords** Fertilizer; Info-gap theory; Opportuneness; Robustness; Uncertainty.