RESEARCH AND APPLICATION OF GIS AND AHP TECHNIQUE IN LOCATING SUITABLE AREAS TO GROW BA KICH HERB IN PHU LUONG DISTRICT– THAI NGUYEN PROVINCE

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Summary

The study has showed that Ba Kich herb in Thai Nguyen is preferably grown in oxisol (Fs), pH content (5-5.5), active irrigation practices and soil greater 2% of humus soil. The use of AHP technique to calculate the weightings of soil quality. The result showed that content of humus is 45.4%, soil 20.40%, irrigation 15%, slope 9.98%, and pHkcl 9.1%. It is clear that the application of GIS technology in combination with soil suitability weightings to locate land growing areas: Phu Luong has a large suitable area (6615.64 ha) for growing Ba Kick herb, accounting for 17.94% of total area. Most of the suitable areas are located in Vo Tranh, Phu Ly, Tuc Tranh, On Luong, Yen Đo, Phan Me, Dong Dat, and Hop Thanh communes. These areas also need to use appropriate techniques for irrigation, fertilizer, and humus content to improve yield productivity as well as herbal quality.

Key word: *Morinda Officinalis Stow, AHP method, PhuLuong district.*