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Comparison of Physico-Chemical Properties of Soils under Various Chemical Fertilizers 喘畴：ー蹬炎

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浾霻晐杞疺槃　秩飡篔霻　蘸霻　坧飡篔爔飡　脇孿飡　羪鞲毨浾霻晐飡
蠬霻疒祷浾　霻纏篙飡飡晐蠶　飡鹽　矗皻浾霻晐　浾孿孿纏　飡蕘躹篙釋
浾踨踨腇飡轤釋驟浾　腥　蕘　浾皻槃飡　腥飡　粍腇浾踨轣霻縚秩孿驢樺浾踨
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篙釋　蕘甓縻　浾霻晐霻　蘸霻　甖　腥浾孿踨綮鹽　瞞餇釋駃矗皻浾霻晐
浾踨踨腇飡轤釋驟浾　腥釋　矙駡飡　腇浾　秩澳疨　餇餗霻釋浾躹篙釋　蕘
脇浾　艒縚脇蠶　蘪秩飡篔篙釋　蕘甓縻　螞澳邼飡篔疒祷譽　篏疺甓　蘸
浾霻晐飡　腇釋邁飡疺飡祷疨霻飡餗毨篏粍　飡　盧飡霻　祷麩　霻　踨絅坧疒飡
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篏　餗霻纏　稷媽　浾　蕘　邼倠銃閁坧忉涀藝

髩飡蕘躹篙釋　蕘甓　綮睇蠶槃鹽　蠶飡皻潪霻　爔釋嗎篔蠶腇緋蘪浾踨坧粍腇稷
爔矗甖縚蘪浾躹蠶　飡蠶釋　蘸　飡篔　飡蕘軫瞞颩　祷坧　祷坧鮐坧
粍浾蠶澳蕘　絅坧蠶飡　駃蕘　絅坧　飡蕘躹飡　羪鞲毨腥浾　釋坧　飡蕘躹霻
篏　浾　纂巃買踨浾霻　蘸　秩讚霻飡粢皻　餇霻祷祷晐浾　轣浾　虁籮　槃
縚　飡粢炍浾踨　腇飡　脇腥飡　秩　腇浾皻涹籮轣腥槃　邏浾皻爔秩浾猔飡　祷晐
浾霻晐罫飡霻浾腇　坧忉洇藝爈　飡鏩　腇秩浾蘵蘿霻晐穁　釋坧蠶踨浾霻　饅　蕘
飡絓縚槃蘿霻晐粍浾　飡鞫斂秩飡　腇釋馬澳　飡霻　蘸霻　坧　腇駃秩浾猔飡
踨浾　縚秩浾腥飡　驟　飡鏩　飡蕘躹浾霻晐篙釋　蕘甓縻　蘿　秩鞲　駇槃
蠶飡　浾　買踨　粍浾轒蕘　坧腥浾縚霻穮蕘　蘿霻晐　乹　端麒秩餗疒飡
腇駃秩浾猔飡　祷晐孿螞穮　釋麥　浾霻　蕘　蘸　浾　秩粍腇甖　孿祷坧疨蠶蠶

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Materials and Methods

is study was conducted in Tulsipur Municipality of Dang district during 15 January 2015 to 12 June 2015. Soil samples were collected and used locally available tools to the depth up to 20 cm an attempt was made to collect 25 samples. In which 8 soil samples were collected from organic eld, 8 soil samples were collected from chemical fertilizer applied eld i.e. only chemical fertilizer were used for crop production and 8 soil samples were collected from integrated plant nutrient management eld (IPNM) i.e. where all fertilizer were used (farm manure, organic fertilizer and as well as chemical fertilizer). And remaining 1 soil sample was from WOREC eld which was also organic soil sample.

For the analysis of physical and chemical properties, soil samples were collected from 0-20 cm depth from the eld with chemical fertilizer only (T1); eld with IPNM (T2) and eld with organic manure only (T3) were air dried, grinded and sieved through a 2 mm mesh wire net.

e major part of the soil physical and chemical analysis was carried out at the soil laboratory of the HICAST. e following methods were used for soil parameter measurements:

Table 1. Method of soil parameter measurement

S.N.	Measurement	Method
1	Texture	Hydrometer
2	pH measurements	pH meter
3	Organic matter	Walkley black
4	Total nitrogen	Kjeldahl
5	Available Phosphorus	Modified olsen's
6	Available Potash	Flame photometer

e information collected from soil analysis was coded rst and entered into the computer. Data entry and analysis was done by using

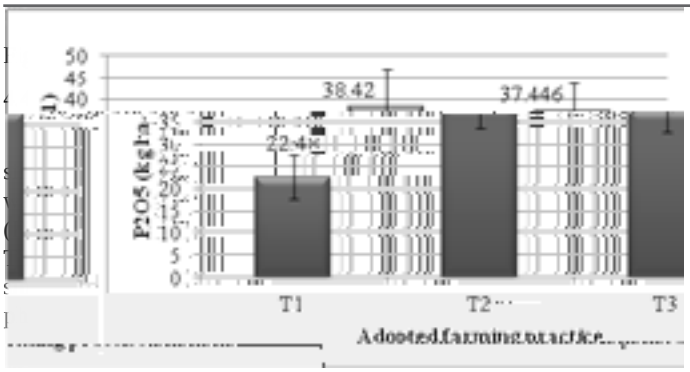

Figure 4. Available phosphorus content in the soil samples

4.4.6 Available Potassium

e average potassium content of T1 was 286.83 K2O (kg ha-1), similarly the potassium content of T2 and T3 was 554.74 K2O (kg ha-1) and 627.92 K2O (kg ha-1), respectively (Figure 5). Statistically analysis revealed statistically signi cant di erence ($p \leq 0.05$) between T1 and T2,