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Species diversity and nutritive value of two natural grazing lands in the Southern province of Sri Lanka

Botanical composition and nutritive value of grazed herbage sampled using a quadrate from coconut lands (CL) and inundated paddy fields (IPF) were determined to evaluate the production potential of the two grazing habitats in the low country wet zone of Sri Lanka. Herbage from coconut lands consisted 80% grasses, 13% legumes and &% weeds. Graminae species such as *Axonopus compressus, Axonopus affinis* and *Stenotaphrum secundatum* were dominant in coconut lands.These species are adapted to reduced light conditions and maintain a reasonable balance with leguminous species such as *Centrosema pubscence* and *Puraria phasiloides* under grazing.

Herbage collected from inundated paddy fields consisted of grasses, legumes, sedge weeds and other species (20%, 1%, 50% and 29% respectively) Poaceae species Oryza rufipogen (red rice), Sacciolepis interrupta, Leersia hexandra and Cyperaceae species Eleocharis dulcis and Schenoplectus grossus were dominant. The rice field habitat generally remains water logged providing ideal ecological niche for water loving plants.

The dry matter content of herbage of two locations show significant ($P<0.050$) variations. (24.8% for CL and 20.0% for IPF respectively). Crude protein content ranged from 10.2 (CL) to 7.2 (IPF). Dry matter digestibility ranged from 49.1 (CL) to 50.2 (IPF). Crude protein and crude fiber contents of herbage in two locations were nor related each other

(r^2=0.4 (CL), r^2=0.17 (IPF) Crude fiber and dry matter digestibility values showed negative correclation (r^2=0.70 for CL) and r^2=0.73 for IPF).

Effect of shading and water logging at CL and IPF respectively, have resulted on species adaptability and diversity at two habitats with super improved grazing pressure in common. Indications are that the provision of low levels of appropriate supplements through farmer awareness programmes would boost production levels in these low input output systems of cattle management.