Data + Science + Technique = Better Grass Conditions

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“optimising the *playing quality* of the golf course in harmony with the conservation of its natural environment under economically sound and socially responsible management”
Seashore paspalum at Le Touessrok Golf Course, Mauritius
Nitrogen
Relative Amount of Mineral Elements in Grass Leaves

- K
- N
- P
- Ca
- Mg
- S
- Fe
- Mn
Relative Amount of Mineral Elements in Grass Leaves
Singapore Island Country Club, *Zoysia matrella*
Chlorophyll extract from grass leaves
the Key to understanding turfgrass growth
Energy
Fertilizer cost = nitrogen cost
Unit price per g of N =

\[ P \div (B \times N \times 10) \]

where:

- \( P \) = the price of one bag of fertilizer
- \( B \) = the mass of one bag of fertilizer, in kg
- \( N \) = the analysis for N in the fertilizer, in %
Urea about $0.50/kg

Unit price =

\[ 10 \div (20 \times 46 \times 10) = \]

$0.001 per g of N
Liquid fertilizer application
Liquid fertilizer application
Grasses at ATC research area
Data
Soil moisture meter
Electrical conductivity meter
Infrared surface thermometer
Chlorophyll extract from grass leaves
Thank you!

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