Eurípedes Malavolta, 1926-2008: Memoriam


Dr. Malavolta

Dr. Eurípedes Malavolta, one of the most recognized Brazilian plant nutrition scientists, died February 19 in Piracicaba, Brazil. He graduated in Agronomy from the University of São Paulo (USP), School of Agriculture Luiz de Queiroz, in 1948 and began his career as Professor in the same Institution. Dr. Malavolta earned several degrees until becoming full Professor in 1958. He served as director from 1964 to 1970 and also served as a visiting scientist in institutions around the world.

Through his career he was distinguished with several honors, including member of the Brazilian Academy of Science in 1964 and National Scientific Merit Degree in 1998. He also represented Brazil in the United Nations as a consultant in science and technology for the benefit of less developed countries of the world.

He retired in 1984, but continued to serve USP in the Center of Nuclear Energy in Agriculture as a permissionary researcher until 3 days before his death. Through his career, he authored 45 books which were translated from Portuguese to several other languages, including Spanish, English, Hindi, and Chinese. Highly recognized by his enormous dedication to education in all levels, Prof. Malavolta published 823 papers and served as adviser for 40 dissertations and 64 Ph.D. theses.

Among several technical contributions, perhaps one of the most recognized worldwide was his work with sulfur, not only concerning increase in crop yield but most especially related to the importance of this nutrient on food protein quality.

In recognition for all his accomplishments, the new IPNI Brazil Program Director, Dr. Luís Ignácio Prochnow, invited Dr. Malavolta last December to write the main article of the March issue of the Brazilian version of *Better Crops (Informações Agronômicas)*. The article, entitled "The Future of Plant Nutrition Concerning Agronomic, Economic, and Environmental Issues", was nearly finished and is being published in his memory. BC

Conversion Factors for U.S. System and Metric Units

Because of the diverse readership of *Better Crops with Plant Food*, units of measure are given in U.S. system standards in some articles and in metric units in others…depending on the method commonly used in the region where the information originates. For example, an article reporting on corn yields in Illinois would use units of pounds per acre (lb/A) for fertilizer rates and bushels (bu) for yields; an article on rice production in Southeast Asia would use kilograms (kg), hectares (ha), and other metric units.

Several factors are available to quickly convert units from either system to units more familiar to individual readers. Following are some examples which will be useful in relation to various articles in this issue of *Better Crops with Plant Food*.

To convert Col. 1 into Col. 2, multiply by:	Column 1	Column 2	To convert Col. 2 into Col. 1, multiply by:
	Length		
0.621	kilometer, km	mile, mi	1.609
1.094	meter, m	yard, yd	0.914
0.394	centimeter, cm	inch, in.	2.54
	Area		
2.471	hectare, ha	acre, A	0.405
	Volume		
1.057	liter, L	quart (liquid), qt	0.946
	Mass		
1.102	tonne[1] (metric, 1,000 kg)	short ton (U.S. 2,000 lb)	0.9072
0.035	gram, g	ounce	28.35
	Yield or Rate		
0.446	tonne/ha	ton/A	2.242
0.891	kg/ha	lb/A	1.12
0.159	kg/ha	bu/A, corn (grain)	62.7
0.149	kg/ha	bu/A, wheat or soybeans	67.2

[1]The spelling as "tonne" indicates metric ton (1,000 kg). Spelling as "ton" indicates the U.S. short ton (2,000 lb). When used as a unit of measure, tonne or ton may be abbreviated, as in 9 t/ha. A metric expression assumes t=tonne; a U.S. expression assumes t=ton.

Other Useful Conversion Factors

Phosphorus (P) x 2.29 = P_2O_5 P_2O_5 x 0.437 = P
Potassium (K) x 1.2 = K_2O K_2O x 0.830 = K
parts per million (ppm) x 2 = pounds per acre (lb/A)

Corn (maize) grain — bu/A x 0.062 = t/ha
Wheat or Soybeans — bu/A x 0.0674 = t/ha