

- GRIME, J. P. & HUNT, R. 1975. Relative growth rate: its range and adaptive significance in a local flora. *Journal of Ecology* 63:393-422.
- IHLENFELDT, H. D. 1967. Über die Abgrenzung und die natürliche Gliederung der Pedaliaceae. *Mitteilungen des Staatsinstituts Allgemeine Botanik Hamburg* 12:43-128.
- KOLLER, D. & NEGBI, M. 1959. The regulation of germination in *Oryzopsis miliacea*. *Ecology* 40:20-36.
- KWESIGA, F. R., GRACE, J. & SANDFORD, A. P. 1986. Some photosynthetic characteristics of tropical timber trees as affected by the light regime during growth. *Annals of Botany* 58:23-32.
- LEISTNER, O. A. & WERGER, M. J. A. 1973. Southern Kalahari phytotoxicology. *Vegetatio* 28:353-399.
- LUDLOW, M. M. & WILSON, G. L. 1970. Studies in the productivity of tropical pasture plants. II. Growth analysis, photosynthesis, and respiration of 20 species of grasses and legumes in a controlled environment. *Australian Journal of Agricultural Research* 21:183-1.
- LUDLOW, M. M., WILSON, G. L. & HESLEHURST, M. R. 1974. Studies in the productivity of tropical pasture plants. V. Effect of shading on growth, photosynthesis and respiration in two grasses and two legumes. *Australian Journal of Agricultural Research* 25:425-433.
- MOSS, H. & TAYLOR, F. W. 1981. *The potential for commercial utilization of veld products*. Ministry of Commerce and Industry of Botswana. Government Printer Gaborone. 228 pp.
- PENNING DE VRIES, F. W. T. & DJITEYE, M. D. 1982. *La productivité des paturages sahéliens*. Pudoc. Wageningen. 525 pp.
- PHILIPPS, E. P. 1938. *The weeds of South Africa*. Government Printer, Pretoria.
- PLOWES, D. C. H. & DRUMMOND, R. B. 1976. *Wild flowers of Rhodesia*. Longman, Salisbury.
- RAGUSA, S., CIRCOSTA, C., GALATI, E. M. & TUMINO, G. 1984. A drug used in traditional medicine, *Harpagophytum procumbens* DC. *Journal of Ethnopharmacology* 11:245-257.
- REDDY, M. B., REDDI, M. V. & RANA, B. S. 1984. Combining ability studies in Sesame (*Sesamum indicum*). *Indian Journal of Genetics and Plant Breeding* 44:314-318.
- SCHULZE, E. D., LANGE, O. L., EVENARI, M., KAPPEN, L. & BUSCHBOHM, U. 1976. An empirical model of net photosynthesis for the desert plant *Hammada scoparia* (Pomel.) Iljin. *Oecologia* 22: 355-372.
- TOLLSMA, D. J., ERNST, W. H. O., VERWEIJ, R. A. & VOOIJS, R. 1987. Seasonal variation of nutrient concentrations in a semi-arid savanna ecosystem in Botswana. *Journal of Ecology* 75:755-770.
- VENABLE, D. L. & LAWLOR, L. 1980. Delayed germination and dispersal in desert annuals: escape in space and time. *Oecologia* 46:272-282.
- VOLK, O. H. 1964. Zur Kenntnis von *Harpagophytum procumbens* DC. *Deutsche Apotheker-Zeitung* 104:573-576.

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ANNOUNCEMENT

DOUTHWAITE, R. J. 1986. Towards hazard assessment: properties and effects of endosulfan applied sequentially as drift spray for tsetse fly control. *Report of the Tropical Development and Research Institute*, G200. Tropical Development and Research Institute, London. iii + 21 pages. ISBN 0-85954-209-2. Price: £1.65 including p. & p. (paperback).

This report summarizes the known hazards of sequential drift spray of endosulfan for tsetse fly control.

The publication is divided into three main sections. The factors affecting hazard are described, both concentration and persistence of the pesticide and target vulnerability. The observed effects of spraying operations are given for different forms of animal life. The final section comprises conclusions and implications for monitoring programmes.

The publication forms a useful basis for the implementation of environmental monitoring programmes for future spraying operations with endosulfan and other pesticides.

Tropical Development and Research Institute.