

Gnidia glauca
(THYMELAEACEAE)

NOTE: Revised from January 21, 1977. Includes
G. eriocephala active from India.

NOMENCLATURE:

Accepted Name: *Gnidia glauca* (Fresen.) Gilg

Approved by: GMC, 4/19/76

References: See Bibliography*

Synonyms: *Lasiosiphon glaucus* Fresen.
L. eriocephala (Graham) Decaisne
Gnidia eriocephala Graham
Lasiosiphon insularis Meisn.
Gnidia insularis Gardn.
G. sisparensis Meisn.
Lasiosiphon speciosus Decne.

Identification: All Tanzanian voucher specimens were annotated by
Bo Peterson, 1974.

FRACTIONATOR:

Kupchan (collections from Africa).
Wall (as *G. eriocephala* - collections from India).

DESCRIPTION: In wind-exposed areas, a multistemmed shrub, one to two meters tall, or in some forests, a tree up to 25 meters tall; but usually a tree from five to ten meters high. Leaves often clustered near the ends of twigs, 7 to 8 cm. long and 1 to 2 cm. wide. Flowers yellow fading to brown, numerous, and in heads.

ECOLOGY: Forest fringes and upper forest outliers of the wet montane forests, 6000 to 9500 feet in elevation. The wet forests are either of the *Podocarpus* (*P. milanjianus*) or *Cassipourea* (*C. malosana*) types which the distribution of these forests correlates well with the distribution of *G. glauca*.

On Mt. Cameroon, *G. glauca* and *Aguaria salicifolia* characterize the subericaceous zone. A shrubby undergrowth of *Hypericum lanceolatum* or *H. revolutum*, *Maesa lanceolata*, species of *Rapanea*, *Myrsine*, *Phillipia* and *Nuxia* are usually present. In eastern Africa, this zone may also include *Hagenia abyssinica*.

ECOLOGY Continued:

In India cited under the "Western Subtropical Hill Forest" at elevations from 4000-7000 feet, and particularly, common in the Mahabaleshwar area. Dominant trees are: Syzygium cumini, Actinodaphne hookeri, Memecylon umbellatum, Randia dumetorum, Flacourzia latifolia, Terminalia chebula, Olea dioica, Glochidion hohenackeri and Pouteria tomentosa. Typical understory trees and shrubs include: Canthium dicocicum, Scutia myrtina, Carvia callosa, Pogostemon plectranthoides, Elaegnus latifolia, Alliophylus cobbe, Capparis pedunculosa, Ziziphus rugosa and Pavetta indica. Flowers November-January.

In Sri Lanka: Open rocky places at elevations from 2000-4000 feet. Flowers most of the year. Common, especially in the Uva Province.

COMMENTS: Closely related species include the actives: G. lamprantha Gilg and G. latifolia (Oliv.) Gilg from Kenya, and G. cuneata Meisn. (= Lasiosiphon meisnerianus Endl.) from South Africa. NOTE: G. eriocephala from India was recently reduced to G. glauca. These species have been assigned to different chemists. An inactive collection made by F. Meyer (# 7882) in Ethiopia was reidentified to G. lamprantha.

Herbarium records often mention this species as common or abundant: Mt. Cameroon, Mt. Muango (Belgium Congo), near Pepa in Zaire, Imatong Mts. (Sudan & Uganda), Njombe in Tanzania, and many places in Ethiopia.

Spjut's samples were collected from the same sites documented on Perdue's specimens; P-11069, P-11163 and P-11682. In collecting roots, most of the plants were eliminated at these sites. However, Spjut did not collect at the site for P-11695 where Perdue has indicated this species to be a large tree and fairly abundant. None of the samples representing the collection P-11695 were active which were sent to both WARF and Farnsworth.

Spjut has also seen G. glauca on Sao Hill (Mufindi, Tanzania) where it is uncommon and occurs as a small shrub to six feet high, a habit much like G. latifolia. It is also interesting that G. kraussiana near Sao Hill was only one to two inches high which is much smaller than its more typical size of about one foot high.

In Ethiopia and India, G. glauca also varies from a small shrub to a large tree.

Also see under G. kraussiana for comments on the genus Lasiosiphon.

USES: Leaves have been applied externally to treat contusions and swellings. Considered a powerful vesicant and has been frequently used as a fish poison.

ACTIVITY DATA IN SPECIES OF Gnidia:

*G. cuneata	PS	M	Wall
G. cluytcioides	PS	N.R.	
*G. glauca	PS	L-H	Wall, Kupchan
G. kraussiana	PS	H	Montanic Acid α-Monoglyceride B-Sitosterol Miscellaneous
*G. lamprantha	PS	DK	Gnidicin Gnididin Gniditrin
*G. latifolia	PS	DK	Kupchan
G. mollis	PS	N.R.	
*G. polyccephala	PS	M	Farnsworth
G. subcordata	PS		Kupchan

*Closely related species.

REFERENCES: Literature:

- *Aymonin, G., 1966. Flore du Cameroun: Thymelaeaceae. Museum National D'Histoire Naturelle, Vol. 5: 69-72.
- _____
Flore du Gabon: Thymelaeaceae. Museum National D'Histoire Naturelle, Vol. 2: 95.
- Boughey, A.S., 1955. The vegetation of the mountains of Bifaria. Proc. Linn. Soc. Vol. 165(2): 144-150 (cf. pp. 146, 148).
- Champion, G. & S.K. Seth, 1968. The Forest Types of India (A Revised Survey). Govt. of India, Delhi; 404 pp. (cf. p. 257).
- Chapman, J.D. & F. White, 1970. The Evergreen Forests of Malawi. Commonwealth Forestry Institute, Univ. of Oxford, 190 pp.
- Cooke, T., 1906. Flora of Bombay. Govt. of India, Calcutta, Vol. 3: 36. (Reprint).
- Cufodontis, G., 1953-1972. Enumeratio Plantarum Aethiopiae Spermatophyta. Jardin Botanique National de Belgique, 1974, Vol. 1 (p. 604).
- Dale, I.R. & P.J. Greenway, 1961. Kenya Trees and Shrubs. Robert MacLehose & Company Limited, Univ. Press, Glasgow (p. 556).
- Domke, W., 1934. Untersuchen über die Systematische und Geographische Gliederung der Thymelaeaceen. Bibliotheca Botanica, Stuttgart, p. 134.
- Eggeling, W.J. & I.R. Dale, 1951. The Indigenous Trees of the Uganda Protectorate. Govt. Printer, Entebbe and Crown Agents for the Colonies, pp. 424-425.
- Fanshawe, D.B., 1973. A Check List of the Woody Plants of Zambia. Govt. Printer, Lusaka.
- Gamble, J.S., 1921. Flora of the Presidency of Madras. Govt. of India, Calcutta, Vol. 2: 871 (Reprint 1957).
- *Gastaldo, P., 1969. Adumbratio Florae Aethiopicae: Thymelaeaceae. Webbia Raccolta Scr. Bot. 24(1): 358-362.
- Gilg, E., 1921. Thymelaeaceae in Engler, "Pflanzenwelt Afrikas"; 3(2): 634.
- Gilg, E., 1894. In Engler, A. & K. Prantl, "Die natürlichen Pflanzenfamilien III," p. 227.

REFERENCES: Literature Continued:

- Gillet, J.B. & P.G. McDonald, 1970. A Numbered Check-list of Trees, Shrubs, and Noteworthy Lianes Indigenous to Kenya. Govt. Printer, Nairobi.
- Hutchinson, J. & J. Dalziel, 1954. Flora of West Tropical Africa. Second edition revised by R.W.J. Keay. Crown Agents for Oversea Governments, Vol. 1(1), p. 176.
- Jackson, J.K., 1956. The vegetation of the Imatong Mountains, Sudan. J. Ecol. 44: 341-374 (cf. p. 369, 370).
- Jacques-Felix, H., 1971. Compte Rendu D'un Voyage Au Cameroun Reconnaissance D'un Etage Montagnard Meconnu De L'Adamaoua. Mitt. Bot. Staatssamml. Munchen 10: 341-353 (cf. p. 348).
- Keay, R.W.J., 1953. An Outline of Nigerian Vegetation. Second Edition. Govt. Printer, Nigeria, 55 pp. (cf. pp. 36, 37).
- Kerfoot, O., 1964. A preliminary account of the vegetation of the Mbeya Range, Tanganyika. Kirkia 4: 191-205 (cf. p. 195).
- Kirtikar, K.R. & B.D. Basu, 1935. Indian Medicinal Plants (Second Edition). M/S Periodical Experts, Delhi (Reprint 1975), Vol. 3: 2170.
- Letouzey, R., 1968. Etude Phytogeographique du Cameroun. Paul Lechevalier, Paris, 511 pp. (cf. pp. 335-338).
- Lind, E.M. & M.E.S. Morrison, 1974. East African Vegetation. Longman Group Limited, London, 257 pp. (cf. p. 38).
- Lisowski, S., Malaisse, F. & J.J. Symoens, 1971. Une Flore Hauts Plateaux du Katanga. Mitt. Bot. Staatssamml. Munchen 10: 51-56 (cf. p. 53).
- Pearson, H.H.W., 1910. In Thiselton-Dyer, "Flora of Tropical Africa." L. Reeve & Co., LTD., London; Vol. 6(1): pp. 230-231.
- Richards, P.W., 1963. Ecological notes on West African vegetation III. The upland forests of Cameroon Mountain. J. Ecol. 51: 529-554 (cf. pp. 544-545).
- *Saldanha, C.J. & D.H. Nicolson, 1976. Flora of Hassan District Karnataka, India. Amerind Publ. Co.; Prem. Printing Press, Lucknow, India; 915 pp. (cf. p. 275).
- Santapau, H., 1967. Flora of Khandala. Govt. of India, Calcutta; p. 233.
- Staner, P., 1935. Les Thymeleacees de la Flore du Congo Belge. Bull. Jardin Bot. Bruxelles XIII (4): 359-360.

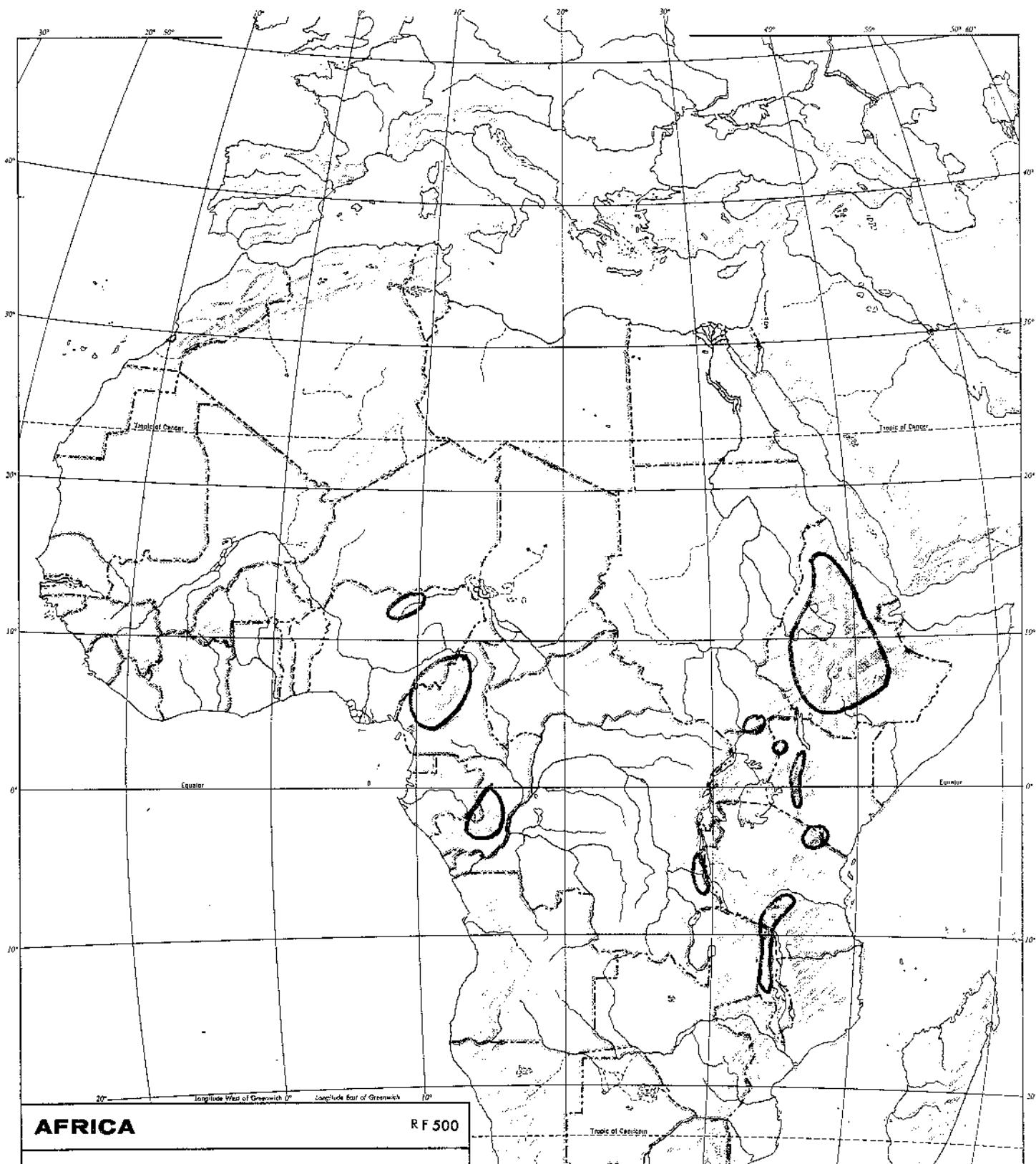
REFERENCES: Literature Continued:

- Tweedie, E.M., 1976. Habitats and check-list of plants on the Kenya side of Mount Elgon. Kew Bull. 31(2): 227-257 (cf. p. 254).
- Trimen, H., 1895. A Hand-Book to the Flora of Ceylon. Part III (Reprint, 1974): 459.
- White, F., 1962. Forest Flora of Northern Rhodesia. Oxford Univ. Press; p. 435.

REFERENCES: Other:

- Spjut, R.W., 1976. USDA, Memorandum "Patterns of Anticancer Activity in Vascular Plants", dated April 15.
- _____, 1974. USDA, Memorandum "Thymelaeaceae", dated January 21.
- _____, Data recorded from herbarium specimens at Kew, England, by R.W. Spjut, October 1976.

PREPARED BY: R. W. Spjut DATE: August 9, 1977



Gnidia glauca: Mountains of tropical Africa. Cameroon, Nigeria, Belgium Congo, Ethiopia, Sudan, Uganda, Kenya, Tanzania, eastern Zaire, northern Zambia, Malawi.

Mites

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