

Office Memorandum • UNITED STATES GOVERNMENT

TO : Dr. B. G. Schubert ✓

DATE: March 6, 1953

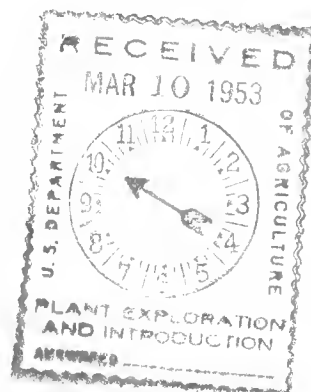
FROM : Dr. E. C. Horning *E.C.H.*

SUBJECT: Summary of Plant Materials

The enclosed summary covers our first 100 plant samples. It is still incomplete in the sense that we have not completed all of the testing, but I thought we should have an interim or progress report.

When the pharmacological reports are complete, we will add a second section to summarize the types of activity found in these materials.

Thanks for the list of poisonous plants. I hope to send you a note about them next week.



National Heart Institute

Laboratory of Chemistry of Natural Products

Examination of Plant Materials

N-1 to N-100

Number: NIH number; PQ number

Name: Species

Plant Part: b - bark r - root sd - seed
 fr - fruit bu - bulb s - stem
 l - leaf pl - plant wo - wood

Family: Botanical classification

Source: As supplied by P.I. note.

Alkaloid: (a) result with Mayer's reagent
 (b) result with silicotungstic acid
 (c) quantitative determination

w - wet, as received
d - dried

Glycoside: + + + + Very active (fresh extract)
 + + + Moderately active (fresh extract)
 + + Active (conc. extract)
 + Weakly active (conc. extract)

<u>Number</u>	<u>Name</u>	<u>Family</u>	<u>Source, Date</u>	<u>Alkaloid</u>	<u>Glycoside</u>
N-1 PQ-X29850	<i>Cephalanthus occidentalis</i> (1)	Rubiaceae	Greenbelt, Md. 10-10-52	-	
N-2 PQ-X29887	<i>Hedera helix</i> (1)	Araliaceae	Silver Spring, Md. 10-13-52	-	
N-3 PQ-X29972	<i>Vernonia noveboracensis</i> (pl)	Compositae	Beltsville, Md. 10-22-52	-	
N-4 PQ-X30062	<i>Sambucus canadensis</i> (1)	Caprifoliaceae	Beltsville, Md. Raleigh, N.C. 10-22-52	-	
N-5 PQ-X30235	<i>Sanguinaria canadensis</i> (r)	Papaveraceae	Prentiss Drug & Chem. Co., N.Y. 11-4-52	++ 0.20% d	
N-6 PQ -X30235	<i>Jateorhiza columba</i> (r)	Menispermaceae	Prentiss Drug & Chem. Co., N.Y. 11-4-52	++ 0.18% w	
N-7 PQ-	<i>Rhododendron maximum</i> (1)	Ericaceae	Highland Co., Va. 11-5-52	-	++++
N-8 PQ-X30278	<i>Lantana</i> sp. (l and s)	Verbenaceae	Devine, Tex. 11-10-52	-	
N-9 PQ-X30382	<i>Melia azederach</i> (fr)	Meliaceae	Dallas, Tex. 11-15-52	-	
N-10	<i>Vinca minor</i> (pl)	Apocynaceae	Silver Spring, Md. 11-17-52	++ 0.28% d	

<u>Number</u>	<u>Name</u>	<u>Family</u>	<u>Source, Date</u>	<u>Alkaloid</u>	<u>Glycoside</u>
N-11 PQ-X30422	<i>Micrasnia parvifolia</i> (wo)	Simaroubaceae	S. Brazil 11-22-52	-	
N-12	<i>Kalmia latifolia</i> (l)	Ericaceae	Beltville, Md. 11-25-52	-	+++-
N-13	<i>Cephalotaxus</i> sp. (l)	Cephalotaxaceae	Glenn Dale, Md. 11-28-52	++ 0.30% w	
N-14	<i>Veronicastrum virginicum</i> (r)	Scrophulariaceae	Greer Drug Co., Lenoir - N.C. 11-28-52		
N-15 PQ-X30570	<i>Valeriana officinalis</i> (r)	Valerianaceae	Greer Drug Co., Lenoir N.C. 11-28-52	++ 0.016% d	
N-16 PQ-X30605	<i>Abrus precatorius</i> (sd)	Leguminosae	Coconut Grove, Fla. 12-8-52	-	
N-17 PQ-X30715	<i>Cassia excelsa</i> (l)	Leguminosae	Coconut Grove, Fla. 12-9-52	++ 0.52% d	
N-18 PQ -X30752	<i>Haemanthus coccineus</i> (bu)	Amaryllidaceae	Cape Prov., S. Africa 12-10-52	++ 0.13% w	
N-19 PQ-X30750	<i>Ammocharis coronica</i> (bu)	Amaryllidaceae	Transvaal, S. Africa 12-10-52	++ 0.73% w	
N-20 PQ-X30753	<i>Brunsvigia</i> sp. (bu)	Amaryllidaceae	Cape Prov., S. Africa 12-10-52	++ 0.12% w	

<u>Number</u>	<u>Name (Plant Part)</u>	<u>Family</u>	<u>Source, Date</u>	<u>Alkaloid</u>	<u>Glycoside</u>
N-21 PQ-X30754	Amaryllis belladonna (bu)	Amaryllidaceae	Cape Prov., S. Africa 12-10-52	++ 0.16% w	
N-22 PQ-X30751	Hypoxis nitida (bu)	Amaryllidaceae	Transvaal, S. Africa 12-10-52	-	++
N-23 PQ-X30748	Ornithogalum thyrsoides (bu)	Liliaceae	Cape Prov., S. Africa 12-10-52	-	++
N-24 PQ-X30749	Hyaenanche globosa (sd)	Euphorbiaceae	Cape Prov., S. Africa 12-10-52	-	++++
N-25 PQ-X30832	Daubentonia punicea (sd)	Leguminosae	Athens, Ga. 12-10-52	-	-
N-26 PQ-X30879	Cassia marginata (l)	Leguminosae	Miami, Fla. 12-10-52	++ 0.01% w	
N-27 PQ-X31246	Pinus sabiniana (l)	Pinaceae	Chico, Calif. 12-22-52	- + 0.26% d	
N-28	Brunsvigia rosea (bu)	Amaryllidaceae	U. of Calif. 12-22-52	++ 0.32% w	
N-29	Brunsvigia rosea (bu)	Amaryllidaceae	U. of Calif. 12-22-52	++ 0.13% w	
N-30 PQ-X31249	Lilium longiflorum hybrid (bu)	Liliaceae	Harbor, Ore. 12-22-52	-	

<u>Number</u>	<u>Name (Plant Part)</u>	<u>Family</u>	<u>Source, Date</u>	<u>Alkaloid</u>	<u>Glycoside</u>
N-31	Elaeagnus umbellata (l)	Elaeagnaceae	Rock Creek Park 12-29-52	-	
N-32	Scilla campanulata (bu)	Liliaceae	Dutch 12-29-52	-	
N-33	Tulipa dasystemon (bu)	Liliaceae	Dutch 12-29-52	-	
N-34	Tulipa eichlera (bu)	Liliaceae	Dutch 12-29-52	-	
N-35	Tulipa clusiana (bu)	Liliaceae	Dutch 12-29-52	-	
N-36 PQ-X31299	Amaryllis belladonna (bu)	Amaryllidaceae	Calif. 1-5-53	++ 0.36% w	
N-37 PQ-X31300	Bowiea volubilis (bu)	Liliaceae	Transvaal, S. Africa 1-5-53	-	-
N-38 PQ-X31301	Hypoxis hemerocallidea (bu)	Amaryllidaceae	Cape Prov., S. Africa 1-5-53	-	
N-39 PQ-X31302	Ornithogalum caudatum (bu)	Liliaceae	Cape Prov., S. Africa 1-5-53	-	+++
N-40 PQ-X31303	Crinum graminicolum (bu)	Amaryllidaceae	S. Africa 1-5-53	++ 0.15% w	

<u>Number</u>	<u>Name (Plant Part)</u>	<u>Family</u>	<u>Source, Date</u>	<u>Alkaloid</u>	<u>Glycoside</u>
N-41 PQ-X31298	Bamboo sp. (l and s)	Gramineae	Chico, Calif. 1-6-53	++ 0.05% w	
N-42 PQ-X31335	Asarum canadense (oil)	Aristolochiaceae	S. B. Fenick & Co. 1-7-53	-	
N-43 PQ-X31541	Drimys sp. (r)	Liliaceae	Cape Prov., S. Africa 1-13-52	-	
N-44 PQ-X31545	Urginea altissima (bu)	Liliaceae	Cape Prov., S. Africa 1-13-53	-	+++
N-45 PQ-X31546	Liliaceae indet. (bu)	Liliaceae	Cape Prov., S. Africa 1-13-53	-	
N-46 PQ-X31544	Chasmanthe floribunda (r)	Iridaceae	Cape Prov., S. Africa 1-13-53	-	++
N-47 PQ-X31543	Haemanthus sp. (bu)	Amaryllidaceae	Cape Prov., S. Africa 1-13-53	++ 0.23% w	
N-48 PQ-X31540	Bulbinella sp. (r)	Liliaceae	Cape Prov., S. Africa 1-13-53	-	
N-49 PQ-X31538	Agapanthus umbellatus (r)	Liliaceae	Cape Prov., S. Africa 1-13-53	-	++
N-50 PQ-X31542	Haemanthus sp. (bu)	Amaryllidaceae	Cape Prov., S. Africa 1-13-53	++ 0.11% w	

<u>Number</u>	<u>Name (Plant Part)</u>	<u>Family</u>	<u>Source, Date</u>	<u>Alkaloid</u>	<u>Glycoside</u>
N-51 PQ-X31539	Brunsvigia sp. (r)	Amaryllidaceae	Cape Prov., S. Africa 1-13-53		
N-52 PQ-X31718	Alettris sp. (r)	Liliaceae	S. B. Penick & Co. 1-16-53	-	+
N-53 PQ-X31718	Salix Dona-nox (r)	Liliaceae	S. B. Penick & Co. 1-16-53	-	
N-54 PQ-X31718	Eupatorium perfoliatum	Compositae	S. B. Penick & Co. 1-16-53	-	
N-55 PQ-X31718	Zanthoxylum americanum (fr)	Rutaceae	S. B. Penick & Co. 1-16-53	-	
N-56 PQ-X31718	Apocynum cannabinum (r)	Apocynaceae	S. B. Penick & Co. 1-16-53	-	++++
N-57 PQ-X31718	Asclepias tuberosa (r)	Asclepiadaceae	S. B. Penick & Co. 1-16-53	-	
N-58 PQ-X31718	Cassia fistula	Leguminosae	S. B. Penick & Co. 1-16-53	-	
N-59 PQ-X31718	Chamaelirium luteum (r)	Liliaceae	S. B. Penick & Co. 1-16-53	-	
N-60 PQ-X31718	Trillium erectum (r)	Liliaceae	S. B. Penick & Co. 1-16-53	-	

<u>Number</u>	<u>Name (Plant Part)</u>	<u>Family</u>	<u>Source, Date</u>	<u>Alkaloid</u>	<u>Glycoside</u>
N-61 PQ-X31674	Hymenocallis sp. (r)	Amaryllidaceae	Calif. 1-16-53	+ + 0.07% w	
N-62 PQ-X31675	Citrus seed (meal)	Rutaceae	Florida 1-16-53	-	
N-63 PQ-X31701	Haemanthus hirsutus (bu)	Amaryllidaceae	Natal, S. Africa 1-19-53	+ + 0.15% w	
N-64 PQ-X31697	Drindopsis maculata (bu)	Liliaceae	Natal, S. Africa 1-19-53	-	
N-65 PQ-X31678	Agave promontori (l)	Amaryllidaceae	Calif. 1-19-53	-	
N-66 PQ-X31705	Hypoxis sp. (bu)	Amaryllidaceae	S. Africa 1-19-53	-	
N-67 PQ-X31704	Hypoxis sp. (bu)	Amaryllidaceae	S. Africa 1-19-53	-	
N-68 PQ-X31680	Agave expansa (l)	Amaryllidaceae	Calif. 1-19-53	-	
N-69 PQ -X31702	Haemanthus natalensis (bu)	Amaryllidaceae	Natal, S. Africa 1-19-53	- +	
N-70 PQ-X31679	Agave aures (l)	Amaryllidaceae	Calif. 1-19-53	-	

<u>Number</u>	<u>Name (Plant Part.)</u>	<u>Family</u>	<u>Source, Date</u>	<u>Alkaloid</u>	<u>Glycoside</u>
N-71 PQ-X31676	Agave deserti (l)	Amaryllidaceae	Calif. 1-19-53	-	
N-72 PQ-X31677	Agave sp. (l)	Amaryllidaceae	Calif. 1-19-53	-	
N-73 PQ-X31700	Haemanthus amarylloides (bu)	Amaryllidaceae	Orange Free State S. Africa 1-19-53	++	
N-74 PQ-X31694	Brunsvigia sp. (bu)	Amaryllidaceae	Natal, S. Africa 1-19-53	- +	
N-75 PQ-X31699	Haemanthus albomaculatus (bu)	Amaryllidaceae	Natal, S. Africa 1-19-53	++	
N-76 PQ-X31693	Amocharis coranica (bu)	Amaryllidaceae	Natal, S. Africa 1-19-53	++	
N-77 PQ-X31726	Vangueria infausta (l)	Rubiaceae	Transvaal, S. Africa 1-23-53	-	
N-78 PQ-X31726	Vangueria infausta (br-w)	Rubiaceae	Transvaal, S. Africa 1-23-53	-	
N-79 PQ-X31726	Vangueria infausta (fr)	Rubiaceae	Transvaal, S. Africa 1-23-53	-	
N-80 PQ-X31727	Homeria sp. (bu)	Iridaceae	Cape Prov., S. Africa 1-23-53	-	

<u>Number</u>	<u>Name (Plant Part)</u>	<u>Family</u>	<u>Source, Date</u>	<u>Alkaloid</u>	<u>Glycoside</u>
N-81 PQ-X31838	Maytenus orbicularis (s-l)	Celastraceae	Peru 1-23-53	-	
N-82 EQ-X32039	Urginea sp. (bu)	Liliaceae	S. Africa 2-5-53	-	
N-83 PQ-X32031	Clivia miniata (pl)	Amaryllidaceae	Natal, S. Africa 2-5-53	- + 0.25% w	
N-84 PQ-X32037	Raphionacme divaricata (bu)	Asclepiadaceae	Natal, S. Africa 2-5-53	-	
N-85 PQ-X32034	Dipcadi glaucum (bu)	Liliaceae	Transvaal, S. Africa 2-9-53	-	++
N-86 PQ-X32040	Agapanthus africanus (r)	Liliaceae	Cape Prov., S. Africa 2-9-53	-	
N-87 PQ-X32035	Haemanthus amarylloides (bu)	Amaryllidaceae	S. Africa 2-9-53	++	
N-88 PQ-X32032	Crinum sp. (bu)	Amaryllidaceae	S. Africa 2-9-53	-	
N-89 PQ-X32033	Crinum sp. (bu)	Amaryllidaceae	S. Africa 2-9-53	-	
N-90 Bell-43491	Narcissus sp. (bu)	Amaryllidaceae	Comm. stock 2-9-53	++ 0.38% w	

<u>Number</u>	<u>Name (Plant Part)</u>	<u>Family</u>	<u>Source, Date</u>	<u>Alkaloid</u>	<u>Glycoside</u>
N-91 PI-164354	Hippeastrum sp. (bu)	Amaryllidaceae	Argentina 2-9-53	-	
N-92 PI-118821	Zephyranthes candida (bu)	Amaryllidaceae	Brazil 2-9-53	-	
N-93 PI-157004	Hippeastrum sp. (bu)	Amaryllidaceae	Boliva 2-9-53	-	
N-94 PI-98387	Zanthoxylum schinifolium (sd)	Rutaceae	Nanking, China 2-9-53	-	
N-95 PQ-X32185	Crinum sp. (bu)	Amaryllidaceae	Transvaal, S. Africa 2-10-53	-	
N-96 PQ-X32184	Buddleia salvifolia (r)	Loganiaceae	S. Africa 2-10-53	-	
N-97 PQ-X32187	Ornithogalum sp. (bu)	Liliaceae	Transvaal, S. Africa 2-10-53	-	
N-98 PQ-X32188	Adenia digitata (r)	Passifloraceae	Transvaal, S. Africa 2-10-53	-	
N-99 PQ-X32186	Crinum sp. (bu)	Amaryllidaceae	S. Africa 2-10-53	-	++
N-100 PQ-X32216	Lewisia rediviva (r)	Portulacaceae	Montana 2-12-53	-	