

Chemical Investigation of Some Indian Plants : Part IV*

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Several known compounds belonging to the class
of alkaloids, carbohydrates, coumarins, lignans,
steroids and triterpenes have been isolated from a
number of Indian plants.

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IN continuation of our previous work¹⁻³, we wish to report here the isolation and identification of a number of known compounds belonging to the class of alkaloids, carbohydrates, coumarins, steroids and triterpenoids from a number of Indian plants. All the plants were properly identified and extracted with solvents referred to in Table 1. The compounds were isolated by the usual techniques and the identity of the compounds was established by comparison of the mmp, TLC and IR spectra with authentic specimens.

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TABLE 1 — COMPOUNDS ISOLATED FROM VARIOUS PLANT SPECIES

Plant	Family	Part of plant	Solvent of extraction	Compound isolated	Ref
ALKALOIDS					
<i>Crotalaria laburnifolia</i> Linn. do	Leguminosae	Whole plant do	Methanol do	Anacrotine Madurensine	4, 5
<i>Glycosmis pentaphylla</i> Correa	Rutaceae	Stem	Hexane	Arborinine	6
<i>Piper longum</i> Linn.	Piperaceae	Fruits	do	Piperine	7
<i>Stephania hernandifolia</i> Walp.	Menispermaceae	Leaves	Methanol	Piplartine <i>d</i> -Fangchinoline <i>d</i> -Tetrandrine <i>iso</i> -Chondrodendrine <i>epi</i> -Stephanine (Aknadine)	8 7, 9 7, 9 7, 9 7, 10
CARBOHYDRATES					
<i>Gardenia latifolia</i> Ait. <i>Ligustrum neilgherrense</i> Wight.	Rubiaceae	Bark	Acetone	D-Mannitol	11
<i>Olea dioica</i> Roxb.	Oleaceae	do	Methanol	do	11
<i>Pavetta tomentosa</i> Roxb.	Rubiaceae	Root	do	do	11
<i>Webera corymbosa</i> Willd.	do	Whole plant	do	do	11
		Leaves	do	do	11
COUMARIN, ISOCOUMARIN, CHROMENE					
<i>Securinega virosa</i> Pax & Hoffn. <i>Sterculia urens</i> Roxb. <i>Calophyllum tomentosum</i> Wight.	Euphorbiaceae Sterculiaceae Guttiferae	Leaves Root, bark Bark	Methanol do Hexane	Bergenin Scopoletin Tomentolide A Tomentolide B Blancoic acid	12 11 13 13 14
LIGNANS					
<i>Piper longum</i> Linn.	Piperaceae	Fruits	Hexane	<i>d</i> -Sesamin	11
STEROIDS					
<i>Acronychia laurifolia</i> Bl. <i>Allophylus serratus</i> Radlk. <i>Ancistrocladus heyneanus</i> Wall. <i>Calophyllum tomentosum</i> Wight. <i>Cinnamomum zeylanicum</i> Bl. <i>Eugenia mooniana</i> Wight. <i>Gardenia latifolia</i> Ait. <i>Hophea wightiana</i> Wt. & Arn. <i>Justicia gendarussa</i> Linn. f. <i>Kigelia pinnata</i> DC. <i>Lannea grandis</i> Engl. <i>Litsea tomentosa</i> Heyne <i>Solanum giganteum</i> Jacq.	Rutaceae Sapindaceae Ancistrocladaceae Guttiferae Lauraceae Myrtaceae Rubiaceae Dipterocarpaceae Acanthaceae Bignonaceae Anacardiaceae Lauraceae Solanaceae	Wood Stem Root Bark do do do do Roots Bark do do Roots	Hexane do do do do do do do do do do do do do do	β -Sitosterol do do Stigmasterol β -Sitosterol do do do do do do do do do do do do	11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11
TRITERPENES					
<i>Anthocephalus cadamba</i> Miq. <i>Chukrasia tabularis</i> Juss. <i>Elephantopus scaber</i> Linn. <i>Gymnostachyum latifolium</i> T. And. <i>Maba nigrescens</i> Dalz. <i>Scolopia crenata</i> Clos.	Rubiaceae Meliaceae Compositae Acanthaceae Ebenaceae Bixaceae	Root, bark Root Whole plant Stem Root, bark Bark	Methanol Hexane do do do do	Quinovic acid Cedrelone Lupeol Lupeol, betulin Friedelin do	11 15 11 11 11 11

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