

and other neurological disorders, but its use has been associated with bone-marrow suppression in some patients.

#### References

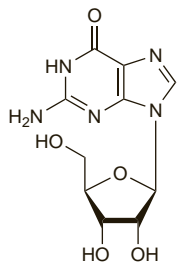
- Kaplan JE, et al. Botulism, type A, and treatment with guanidine. *Ann Neurol* 1979; **6**: 69–71.
- Critchley EMR, et al. Outbreak of botulism in North West England and Wales. *Lancet* 1989; **ii**: 849–53.
- Neal KR, Dunbar EM. Improvement in bulbar weakness with guanoxan in type B botulism. *Lancet* 1990; **335**: 1286–7.
- Oh SJ, et al. Low-dose guanidine and pyridostigmine: relatively safe and effective long-term symptomatic therapy in Lambert-Eaton myasthenic syndrome. *Muscle Nerve* 1997; **20**: 1146–52.

### Guanosine

Guanine Riboside; NSC-19994; Vernine. 2-Amino-9-β-D-ribofuranosyl-9H-purin-6(1H)-one.

Гуанозин

$C_{10}H_{13}N_5O_5 = 283.2$ .  
CAS — 118-00-3.



#### Profile

Guanosine is an endogenous guanine nucleoside involved in many biological processes; it is one of the components of nucleic acids (p.2355). Guanosine is included in preparations for peripheral and cerebral vascular disorders and myopathies; guanosine monophosphate has been used similarly.

#### Preparations

**Proprietary Preparations** (details are given in Part 3)

**Multi-ingredient:** **Cz.:** Laevadosin†; **Spain:** Nutrancel.

### Gutta Percha

Gummi Plasticum; Gutapercha; Gutt. Perch.

**Pharmacopoeias.** In *US*.

**USP 31** (Gutta Percha). The coagulated, dried, purified latex of the trees of the genera *Palaquium* and *Payena* and most commonly *Palaquium gutta* (Sapotaceae). It occurs in lumps or blocks of variable size; externally brown or greyish-brown to greyish-white in colour; internally reddish-yellow or reddish-grey and having a laminated or fibrous appearance. It is flexible but only slightly elastic. Has a slight, characteristic odour. Insoluble in water; partly soluble in carbon disulphide, in turpentine oil, and in benzene; about 90% soluble in chloroform. Store under water. Protect from light.

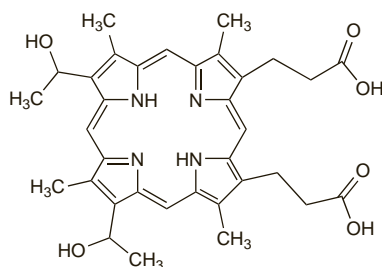
#### Profile

Gutta percha has been used in various dressings. In dentistry, gutta percha has been used as a filling material and as the basis of compounds for taking dental impressions.

### Haematoporphyrin

Hematoporphirina.

$C_{34}H_{38}N_4O_6 = 598.7$ .  
CAS — 14459-29-1.



#### Profile

Haematoporphyrin is a red pigment, free from iron, obtained from haematin. It is an ingredient of preparations promoted as tonics, particularly for the elderly, and has been used in the treat-

ment of depression. Derivatives of haematoporphyrin are used as photosensitisers in the photodynamic therapy of malignant neoplasms (see Porfimer Sodium, p.764).

#### Preparations

**Proprietary Preparations** (details are given in Part 3)

**Multi-ingredient:** **Austria:** KH3; **Chile:** Actebral; KH3-Vit†; KH3†; **Ger.:** KH3†; Revicain comp plus†; **Hong Kong:** KH3; **Ital.:** Porfirin 12; Tonogen; Vit-Porphyrin†; **NZ:** KH3; **Thai.:** KH3.

### Hamamelis

Amamelide; Csodamogyorólevél (hamamelis leaf); Hamamelidis; Hamamelidis folium (hamamelis leaf); Hamameliskenlehti (hamamelis leaf); Hamamelis de virginie; Hamamelis, feuille d' (hamamelis leaf); Hamamelisblad (hamamelis leaf); Hamamelij lapai (hamamelis leaf); Trollhassel; Vřínový list (hamamelis leaf); Virginsk Troldnød; Witch Hazel; Zaubehasel; Zaubernuss.

**Pharmacopoeias.** In *Eur.* (see p.vii) and *US*.

**Ph. Eur. 6.2** (Hamamelis Leaf). The whole or cut dried leaves of *Hamamelis virginiana* containing not less than 3% tannins, expressed as pyrogallol ( $C_6H_6O_3 = 126.1$ ), calculated with reference to the dried drug. Protect from light.

**USP 31** (Witch Hazel). A clear, colourless distillate prepared from recently cut and partially dried dormant twigs of *Hamamelis virginiana*. pH between 3.0 and 5.0. Store in airtight containers at a temperature not exceeding 40°.

#### Profile

Hamamelis has astringent properties and contains gallic acid, a bitter principle, and a trace of volatile oil. It is used in preparations for the symptomatic relief of haemorrhoids (p.1697). Hamamelis water is used as a cooling application and has been applied as a haemostatic.

Hamamelis is used in herbal preparations for a variety of disorders.

**Homoeopathy.** Hamamelis has been used in homoeopathic medicines under the following names: Hamamelis virginiana; Hamamelis, Folium; Hamamelis virginiana e foliis; Hamamelis virginiana ex cortice summitatibusque; Hamamelis virginica; Ham. virg.

#### Preparations

**USP 31:** Witch Hazel.

**Proprietary Preparations** (details are given in Part 3)

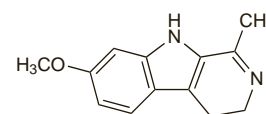
**Austral.:** Optrex Original; Witch Doctor†; **Austria:** Hametum; Sperti Preparation H†; **Canada:** Optrex; **Chile:** Similia†; Sperti Preparacion H Clear Gel†; **Fr.:** Optrex; **Ger.:** Aescorin N†; Fiamelis†; Haemo Duoform†; Hamasana†; Hametum; Posterne; Tampostonen H†; Venoplant top†; **Ital.:** Acqua Virginia; Derminal; Optrex; **Malaysia:** Optrex; **Mex.:** Tia Puppy; **NZ:** Optrex; **Pol.:** Phloderm; **Port.:** Optrex; **Singapore:** Optrex; **Spain:** Derminal; Hametol; Hemo Derminal; Optrex; **Switz.:** Mavena Anal-Gen; Optrex; **Thai.:** Optrex; **Turk.:** Hametan; **UK:** Optrex Preparation H Clear Gel; Witch Doctor; Witch Sunsores; **USA:** A-E-R; Fleet Medicated Pads†; Neutrogena Drying.

**Multi-ingredient:** **Arg.:** Banofal†; Clematis III Oligoplex†; Domoderin; Ecnagel; Esculeol P; Lavandula Oligoplex; Manzan; Venoful; VNS 45; **Austral.:** Anusol; Bioglan Cirlo†; Gentlees; Hemocane; Optrex; Proflo†; **Austria:** Arnice†; Inotyl; Mirfulan; Sulgan 99; Tampositorien mit Belladonna; **Belg.:** Hemorhinol; Purigel Crisp; Rectovasal; **Braz.:** Bromidrastina†; Helmodotti; Hemorroidex†; Higicler; Malvatricin Natural Organic; Manolio†; Mironroidin†; Proctosan; Supositorio Hamamelis Composto†; Varizol†; Visionom; **Canada:** Onrectal; Penaten; Preparation H Cooling Gel; Tucks; **Chile:** Hemorrol†; Proctoplex; Varicare†; **Cz.:** Aviril H†; Sagittaproct†; **Fr.:** Aphloine P; Climaxol; Ekseme; Evarose; HEC; Histo-Fluine P; Inotyl†; Jouvence de l'Abbe Soury; Keracnyl eau nettoyante; Keracnyl stop bouton; Mediflor Tisane Circulation du Sang No 12; Ophthalmine; Pastilles Monleon; Phleboseol†; Phytomelis; Purif-Ac Gel; Veinostase; **Ger.:** Aescusan; Anisan†; Chlorophyllin Salbe "Schuh"; Eulatin NN; Hametum-N†; Heusin†; Leukona-Wundsalbe†; Mirfulan; Sanaderm†; Trauma-cyl; Varicylum-S; Venacton†; Welelda Hamorrhoidalzpfchen; **Hong Kong:** Eye Glo Plus; **India:** Oculosan; **Israel:** Aforinol; Hamon Care; Inotyl; **Ital.:** Altacura Ipragocce; Centella Complex; Centeril H; Decon Ovuli; Dermila Flebozin; Dermatina; Dermoprolin†; Eulux; Ginoxil Ecoschiama; Hamamilla†; Herbe†; Inotyl†; Intim; Iridil; Lycia Luminique; Nevril; Proctonet†; Proctopure; Sacnel; Salviette H; Sedalen Cort†; Sedilene Procto†; Steril Zeta; Stilmag†; Varicogel†; Venactive; Venalta; Venoplus†; Venotrauma†; **Mex.:** Almodin; Prespir; Supranettes Naturalag; **Mon.:** Fluon; **NZ:** Lacto Calamine†; Optrex Red-Eye Relief; **Port.:** Hemofoissural; **S.Afr.:** Lacto Calamine†; Loto Pruni Comp cum Cupro; Stibium Comp; **Singapore:** HEC†; Stop-Itch Plus; **Spain:** Banofal†; Hemodren Composto†; Lamnotyl†; Ojosel; Roid-hemo†; Ruscimel†; Solucion Schoum; Venofit; **Switz.:** Anal-Gen†; Collypan; Euproctol N; Frigoplasma†; Haemocorint; Haemolan; HEC; Mavena Proctal-Gen; Oculosan; Optrex; Optrex compress; Pommade Nasale Radix†; Riccoviant†; Suppositoires contre les hemorroides†; Tendro; **Thai.:** Opplin†; **UK:** Adiantine; Eye Dew; Heemex; Lacto Calamine; Modern Herbals Pile; Optrex Red Eyes; Swarm; Tea Tree & Witch Hazel Cream; Varicose Ointment; Vital Eyes; **USA:** Clearasil Double Clear; Preparation H Cooling Gel; Tucks; **Venez.:** Biomicovo†; Camoly†; Camoly† Plus; Flucirac; Supranettes†.

### Harmaline

Harmalina. 3,4-Dihydroharmine.

$C_{13}H_{14}N_2O = 214.3$ .  
CAS — 304-21-2.



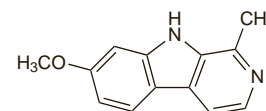
**Description.** Harmaline is an alkaloid obtained from peganum, the dried seeds of *Peganum harmala* (Zygophyllaceae). The following terms have been used as 'street names' (see p.vi) or slang names for various forms of harmaline or preparations containing harmaline: Caapi; Huasca; Purga, la; Vine; Yage.

### Harmine

Harmina; 7-Methoxy-1-methyl-9H-pyrido[3,4-b]indole.

Хармин

$C_{13}H_{12}N_2O = 212.2$ .  
CAS — 442-51-3.



**Description.** Harmine is an alkaloid obtained from peganum, the dried seeds of *Peganum harmala* (Zygophyllaceae), also known as syrian rue. Harmine is identical with an alkaloid known as banisterine or telepathine obtained from *Banisteriopsis caapi* (Malpighiaceae). The following terms have been used as 'street names' (see p.vi) or slang names for various forms of harmine or preparations containing harmine: Rue.

#### Profile

Harmine and harmaline are the main active principles of a hallucinogenic drink, known in South American regions as 'ayahuasca', 'caapi', or 'yage', that is made from closely related plants of the family Malpighiaceae. They have no therapeutic use.

### Helonias

Blazing Star; Chamaelirium; False Unicorn; Starwort.

#### Profile

Helonias is the root of *Chamaelirium luteum* (*Helonias dioica*) (Liliaceae). It is used in herbal medicine particularly for gynaecological disorders.

**Homoeopathy.** Helonias has been used in homoeopathic medicines under the following names: Chamaelirium luteum; Helonias dioica; Helon.

#### Preparations

**Proprietary Preparations** (details are given in Part 3)

**Multi-ingredient:** **Austral.:** Capsella Complex; Nervatona Calm; Nervatona Focus; **UK:** Period Pain Relief.

### Henna

Henna Leaf; Henné; Lawsonia.

#### Profile

Henna is the dried leaves of *Lawsonia inermis* (*L. alba*) (Lythraceae), containing lawsone (p.2331). Powdered henna is used for dyeing the hair, skin, and nails.

**Adverse effects.** Allergic skin reactions to henna used to dye the skin have been reported.<sup>1</sup> Such reactions were usually due to additives used to shorten the application time of the dye and allergic reactions to 'plain' henna were rare. Similar reactions have been reported<sup>2-10</sup> after henna tattoos on the skin. The adulterant, which is added to natural henna to darken it ('black henna'), was identified<sup>2-5</sup> as paraphenylenediamine (p.2363). There have been reports of the paraphenylenediamine adulterant producing permanent skin pigment changes<sup>7,10</sup> and also cross-sensitisation to paraphenylenediamine-containing hair dyes<sup>7-10</sup> and textile dyes;<sup>10</sup> there is also the possibility of sensitisation to other allergens such as natural rubber latex.<sup>10</sup>

The suggestion that henna may cause neonatal hyperbilirubinaemia is discussed under Lawsone, p.2331.

- Lestringant GG, et al. Cutaneous reactions to henna and associated additives. *Br J Dermatol* 1999; **141**: 598–600.
- Brancaccio RR, et al. Identification and quantification of paraphenylenediamine in a temporary black henna tattoo. *Am J Contact Derm* 2002; **13**: 15–8.
- Marcoux D, et al. Sensitization to para-phenylenediamine from a streetside temporary tattoo. *Pediatr Dermatol* 2002; **19**: 498–502.