Research Chemicals

Die Entstehung psychoaktiver Substanzen durch natürliche Zuchtwahl

Referat zum Fachtag „Research Chemicals – Informationen zu Legal Highs“ am 03.11.2011 in Frankfurt am Main

Danny Wolf

Definitionen

Princeton's WordNet
a psychoactive drug deliberately synthesized to avoid anti-drug laws; mimics the effects of a banned drug; law was revised in 1986 to ban designer drugs

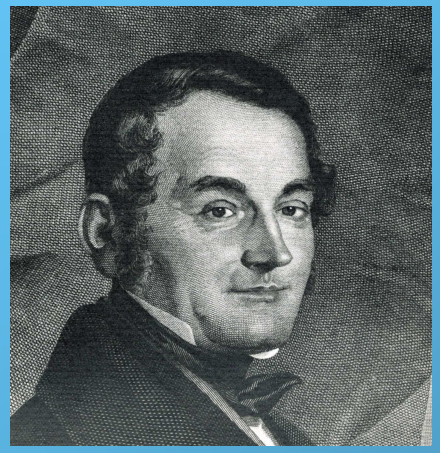
Lexikon der Chemie (Spektrum AV)
***Designer-Drogen**, synthetische Rauschmittel, die entwickelt werden, um betäubungsmittelrechtliche Vorschriften zu umgehen. […]*

Webster's New World College Dictionary
a drug that has been developed by changing slightly the chemical structure of an existing drug, as to evade legal prohibition or to produce certain desired effects

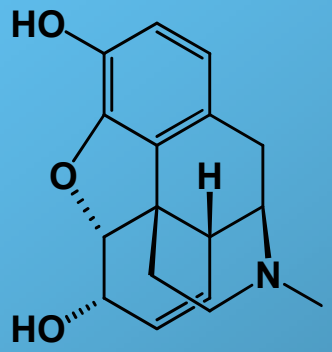
Am Anfang war das Morphin

<u>1805</u>
Friedrich Sertürner isoliert die wirksame Komponente des Opiums und nennt sie Morphium

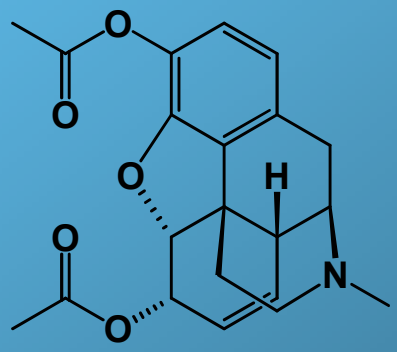
1827
Vertrieb des Morphins durch Heinrich Emanuel Merck



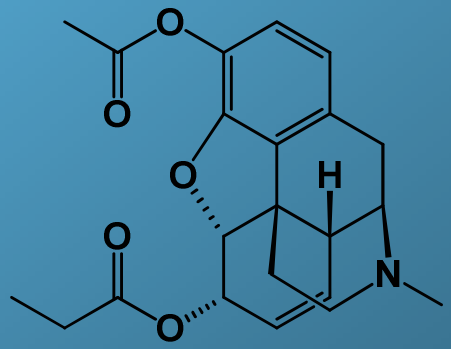
1874
Erstsynthese von Diacetylmorphin durch C. R. Alder Wright



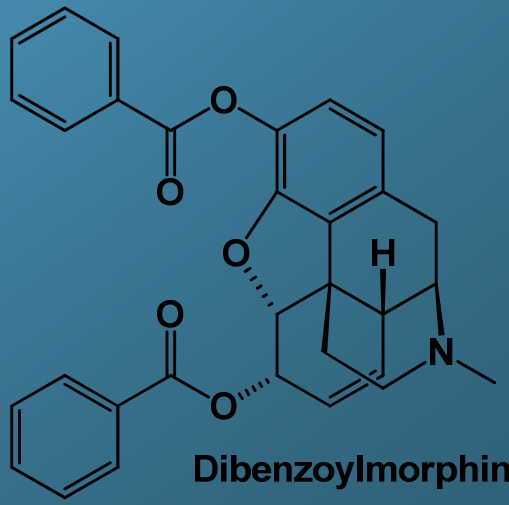
Morphin



Heroin



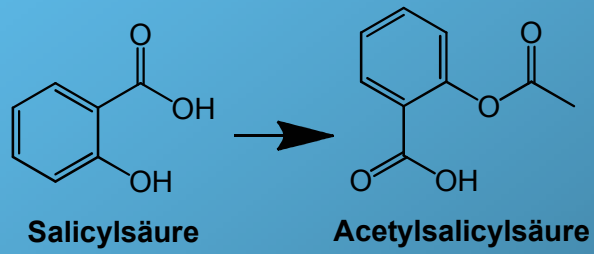
Acetylpropionylmorphin



Dibenzoylmorphin

1897

„Wiederentdeckung“ durch Felix Hoffmann



Salicylsäure **Acetylsalicylsäure**

1898 bis 1910

Vermarktung von Heroin durch die Farbenfabrik

Am. J. Ph.] 7 [December, 1901

BAYER Pharmaceutical Products

HEROIN—HYDROCHLORIDE

is pre-eminently adapted for the manufacture of cough elixirs, cough balsams, cough drops, cough lozenges, and cough medicines of any kind. Price in 1 oz. packages, $4.85 per ounce; less in larger quantities. The efficient dose being very small (1-48 to 1-24 gr.), it is

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(In bronchitis, phthisis, whooping cough, etc., etc.)

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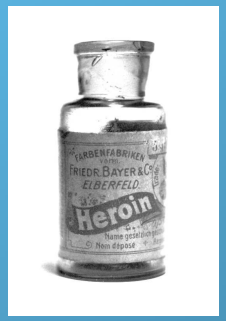
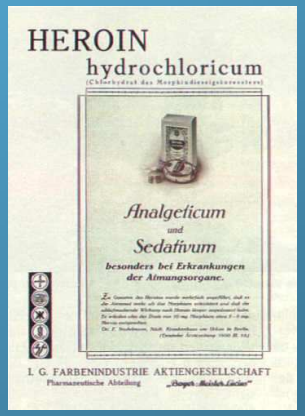
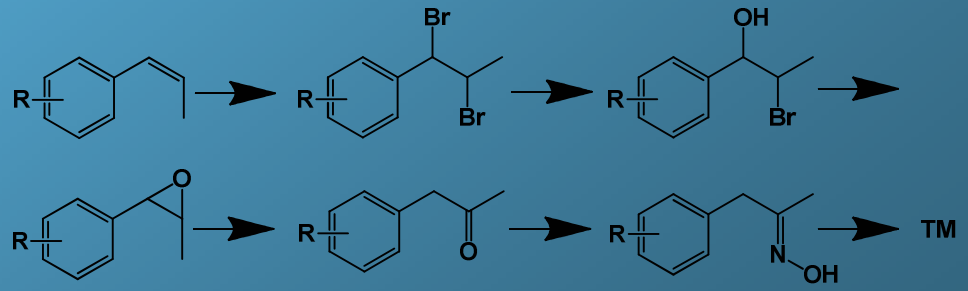




1910

Erstsynthese substituierter Phenylisopropylamine durch Mannich

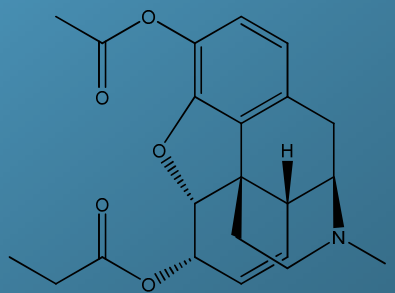


Die ersten Designer Drogen

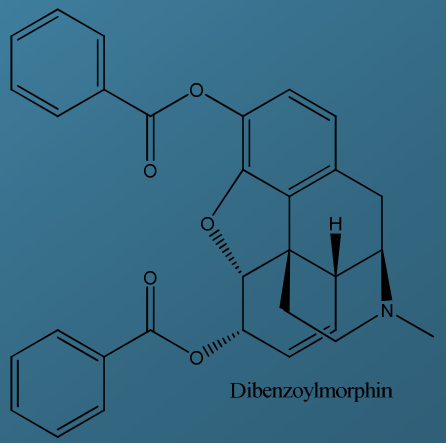
<u>23.01.1912</u>
Internationale Opiumkonferenzin Den Haag
→ Kontrolle des Opiat- und Kokainmarktes

<u>1925</u>
Internationale Opiumkonferenz in Genf
→ Totalverbot von Heroin, Kokain und Cannabis

► Auftauchen der ersten Desginerdrogen vom Opiat-Typ



Acetylpropionylmorphin

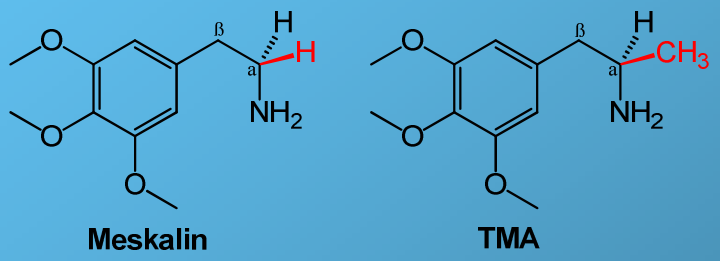


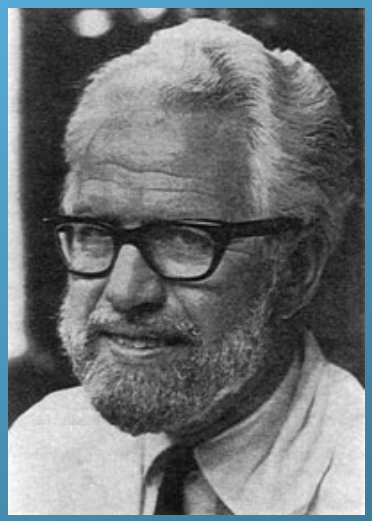
Dibenzoylmorphin

Die psychedelischen Jahrzehnte

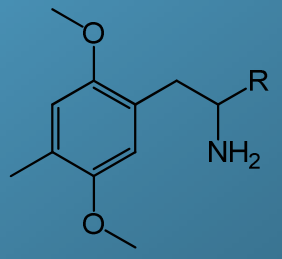
<u>um 1930</u>
Gordon Alles entdeckt die psychoaktive Wirkung des Amphetamins und des MDAs

<u>Anfang der 60er</u>
Alexander Shulgin erforscht die TMA-Reihe

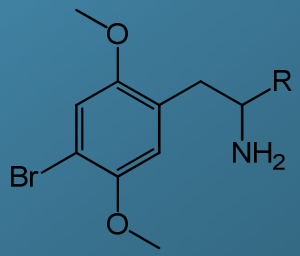




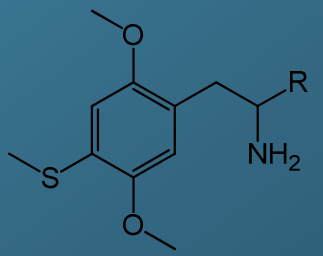
Entdeckung des 2,4,5-Substitutionsmusters und Entwicklung entsprechender Amphetamin- und PEA-Derivate



R = Me: DOM/STP
R = H: 2C-D/LE-25



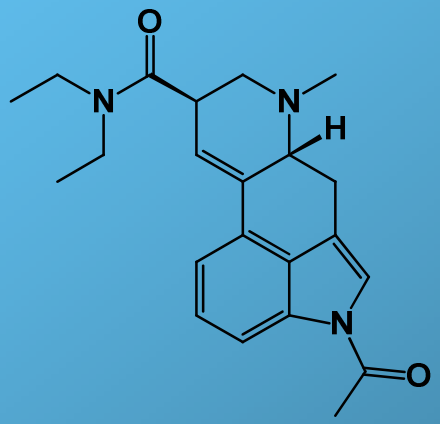
R = Me: DOB
R = H: 2C-B



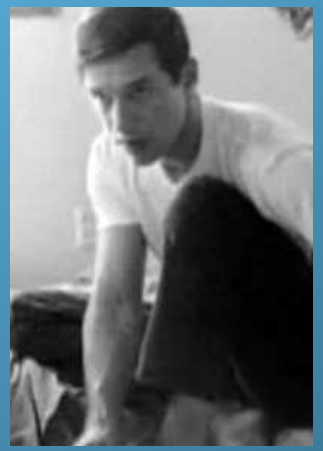
R = Me: ALEPH
R = H: 2C-T

1968

LSD-Verbot in den USA (Deutschland 1971) und anschließende Verbreitung von ALD-52 ("Orange Sunshine") durch Tim Scully und Nick Sand



ALD-52



1970

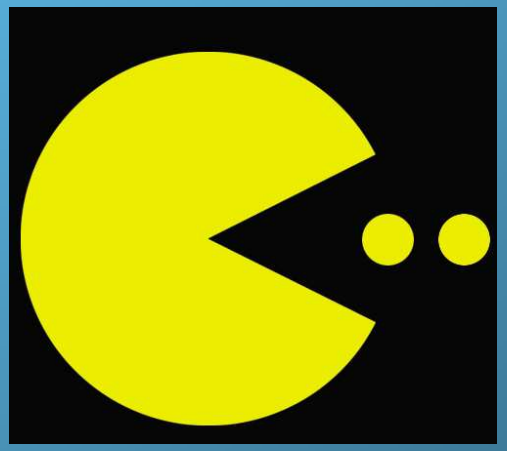
Einführung des „Controlled Substances Act" und Verbot von MDA
→ PMA taucht erstmals auf den Straßen auf

1976

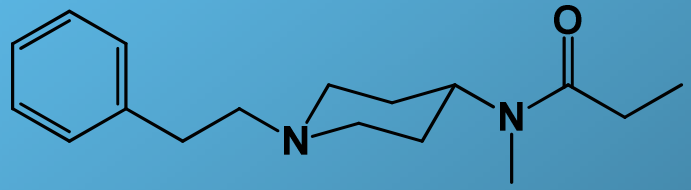
Neue MDMA-Synthese durch Shulgin und Weitergabe an den Psychologen Leo Zeff
→ schnelle Verbreitung von MDMA unter Psychotherapeuten („Boston Group")

Die wilden 80er

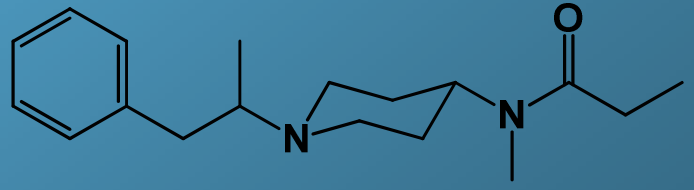
<u>1981</u>
MDMA wird Ecstasy und verbreitet sich unter rekreationellen Konsumenten („Texas Group“)



<u>Ende 1979 bis Ende 1980</u>
vermehrt Todesfälle unter Opiatkonsumenten; kein bekannter Wirkstoff auffindbar → „China White“ (α-Methylfentanyl)



Fentanyl



alpha-Methylfentanyl

<u>1982</u>
erste Fälle von „Parkinson“ unter Opiatkonsumenten
→ „Super Demerol“/MPPP

1985

DEA stuft MDMA als „Schedule I"-Droge ein, Deutschland zieht 1986 mit der Aufnahme ins BtmG (Anlage I) nach

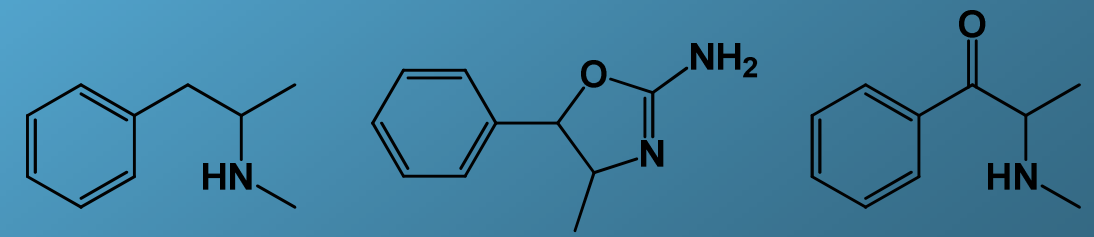
1986

Erlass des „Federal Analog Act" in den USA

späte 80er

Methamphetamin-Edukte werden stärker kontrolliert

→ 4-Methylaminorex und Methcathinon erscheinen auf dem Markt



Methamphetamin 4-Methylaminorex Methcathinon

Der Weg in die Gegenwart

<u>frühe 90er</u>
PIHKAL und TIHKAL kommen auf den Markt

<u>Ende 90er bis Anfang 2000</u>
Internethandel mit bisher unbekannten psychoaktiven Substanzen beginnt

→ Research Chemicals werden geboren
Google heizt den Markt weiter an

Evolution

Biologisch

natürliche Mutation
► Veränderung des Genmaterials und Entwicklung einer Adaption

natürliche Selektion
► Umweltbedingungen üben Selektionsdruck auf unterschiedliche Mutanten aus

sexuelle Selektion
► Sexualpartner bevorzugen eine Adaption gegenüber der anderen

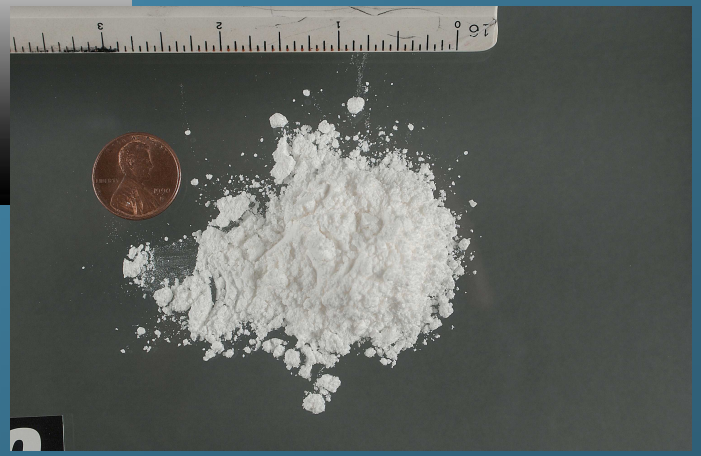
Chemisch

natürliche Mutation
► Veränderung des Molekülstruktur durch Forschungseinrichtungen

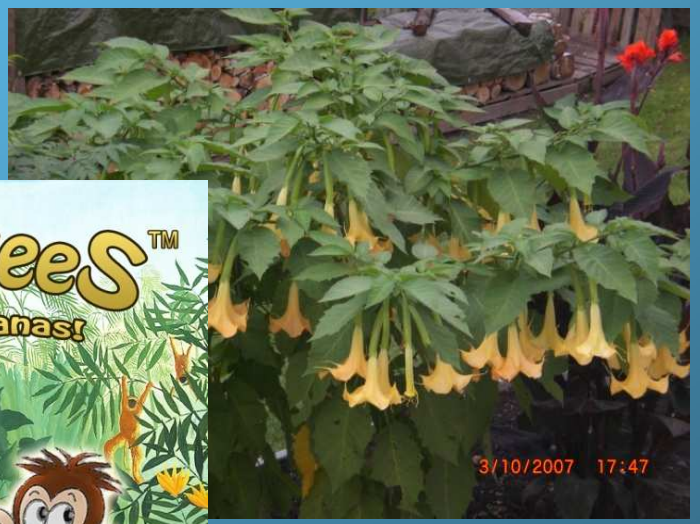
natürliche Selektion
► Gesetzeslage übt Selektionsdruck auf unterschiedliche Molekülmutanten aus

sexuelle Selektion
► Konsumenten bevorzugen eine Substanz gegenüber der anderen

Herbal High



Legal High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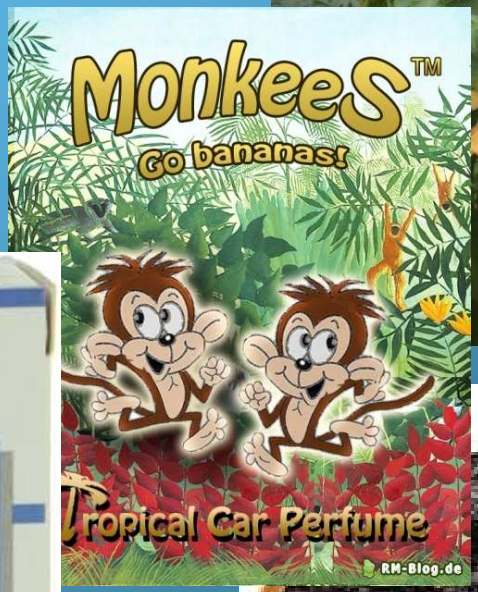
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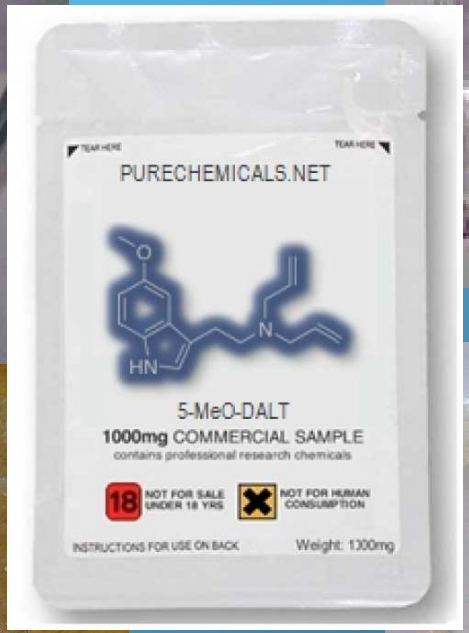
20 HARTKAPSELN N2

Research Chemical



Badesalz/Räuchermischung/ Dünger/Raumerfrischer

Wirkungen

- euphorisierend

Hochgefühl, gehobenes Lebensgefühl größten Wohlbefindens, gesteigerte Lebensfreude, verminderte Hemmungen

- psychostimulierend

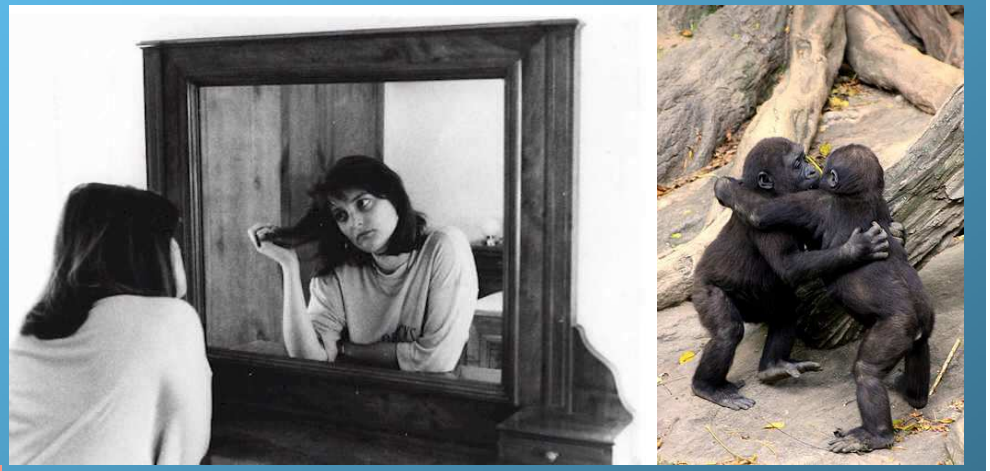
Erhöhung der Aktivität des Zentralnervensystems, erhöhte Wachsamkeit, Reduktion der Müdigkeit, des Schlafbedürfnis, des Hungers

Wirkungen

- entaktogen/empathogen

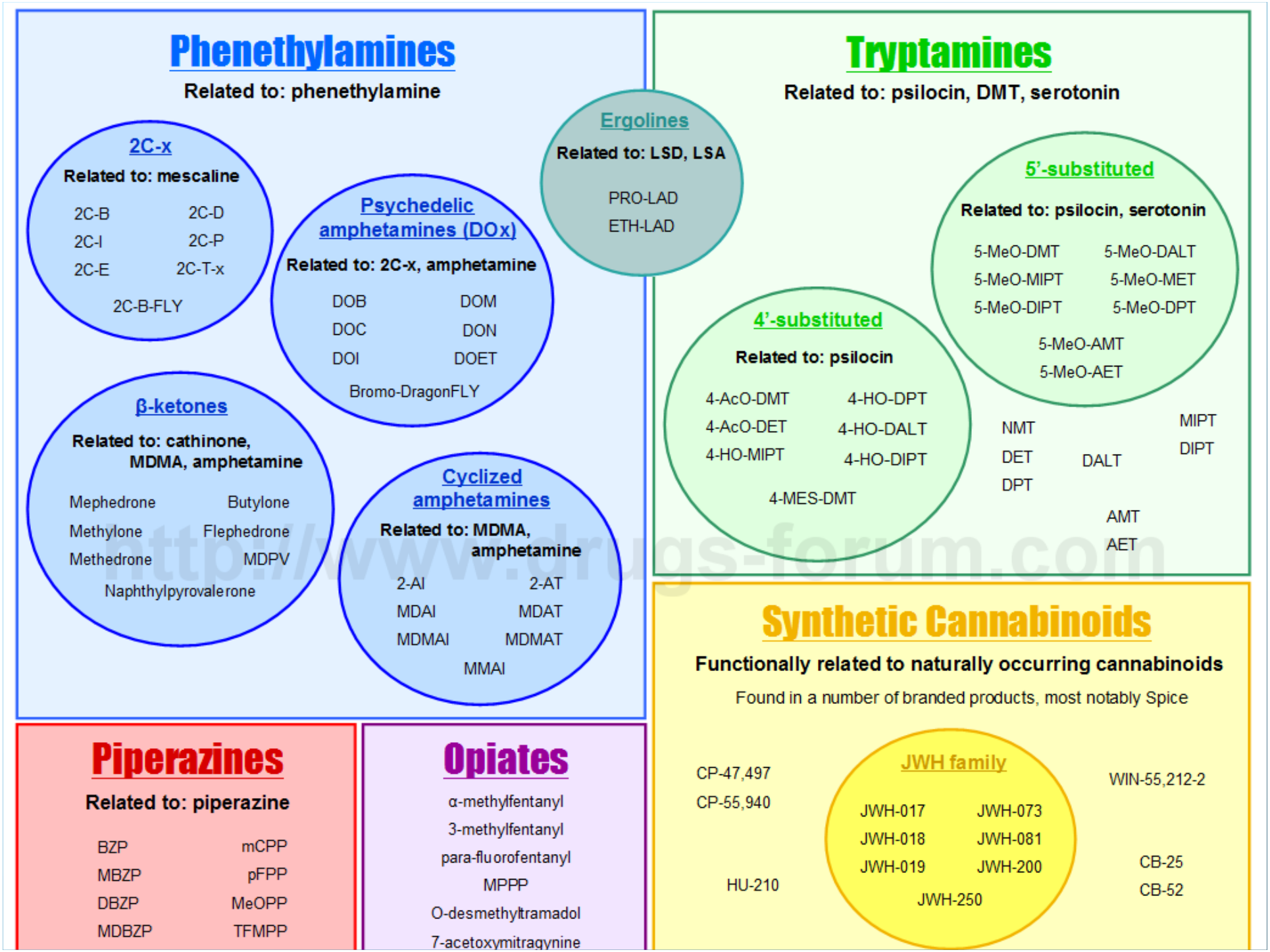
intensivere Wahrnehmung des eigenen Innenlebens/

Empathie erzeugend



- halluzinogen (psychedelisch, dissoziativ, deriliant)

Veränderung der visuellen und akustischen Wahrnehmung



http://www.drugs-forum.com

Die Gegenwart

THE Sun

Wednesday, 8 June 2011

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EXCLUSIVE

NRG-1 is 25p a hit and will kill many more than meow

From VIRGINIA WHEELER
in Antwerp, Belgium

Published: 31 Mar 2010

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Add a comment (24)

A BRIT chemist who helped flood the UK with meow meow has warned of an even DEADLIER legal high about to hit us.

Worried Dave Llewellyn told The Sun that the new drug NRG-1 will be "Britain's worst nightmare" leading to mass brain damage and death.

Devil's powder ... chemist Dave is raising the alarm over NRG-1 aka Energy 1 or Rave

The horror drug **COSTS** just 25p a hit compared to £10 for a rock of crack cocaine, yet it is 13 times **STRONGER** than coke and even more **ADDICTIVE** than heroin.

But authorities are powerless to prevent it flooding our streets because it is completely **LEGAL.**

"It will wreck hundreds of lives and kill many times more than meow meow - and far more horrifically. It will make users want to tear out their own eyes.

He turned whistleblower to us in a bid to prevent NRG-1 - which also has the street names Energy 1 or Rave - reaching the UK's markets too.

He said the new drug, otherwise known as naphyrone, would kill and mentally destroy so many people it would quickly "fill an Olympic stadium".

"It will make them feel like God for about 12 hours. But
when it wears off they will feel worse than they ever have in their lives. They won't sleep for three days.

Infos? Wikipedia informiert

Naphyrone

From Wikipedia, the free encyclopedia

"NRG-1" redirects here. For the protein NRG1, see Neuregulin 1.

Naphyrone also known as **O-2482** and **naphthylpyrovalerone**,[1] is a drug derived from pyrovalerone that acts as a triple reuptake inhibitor,[2] producing stimulant effects and has been reported as a novel designer drug.[3] No safety or toxicity data is available on the drug.[4]

The drug has been marketed under the name **NRG-1**, although only a minority of samples of substances sold under this name have been found to actually contain naphyrone,[5][6] and even samples that proved to contain genuine β-naphyrone were in some cases also found to contain the 1-naphthyl isomer α-naphyrone in varying proportions, further confusing the reported effects profile.[7][8]

Contents [hide]

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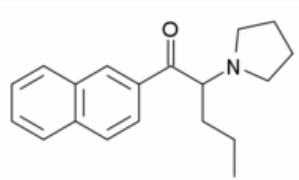
Naphyrone



Systematic (IUPAC) name
1-naphthalen-2-yl-2-pyrrolidin-1-ylpentan-1-one
Clinical data
Pregnancy cat. ?

See also [edit]

- α-PVP
- MDPV
- Methylnaphthidate
- Naphthylisopropylamine
- N,O-Dimethyl-4-(2-naphthyl)piperidine-3-carboxylate
- 2β-Propanoyl-3β-(2-naphthyl)-tropane (WF-23)
- Pronethalol
- Pyrovalerone
- Substituted cathinone

v·d·e	**Stimulants (N06B)**	[show]
v·d·e	**Adrenergics**	[show]
v·d·e	**Dopaminergics**	[show]
v·d·e	**Serotonergics**	[show]
v·d·e	**Phenethylamines**	[show]

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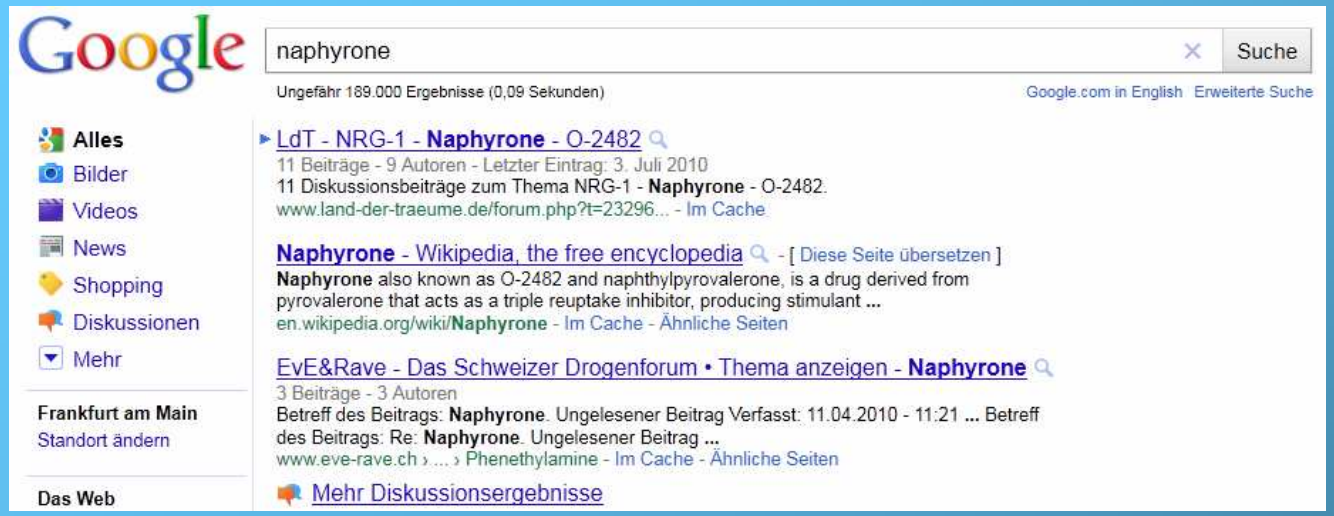
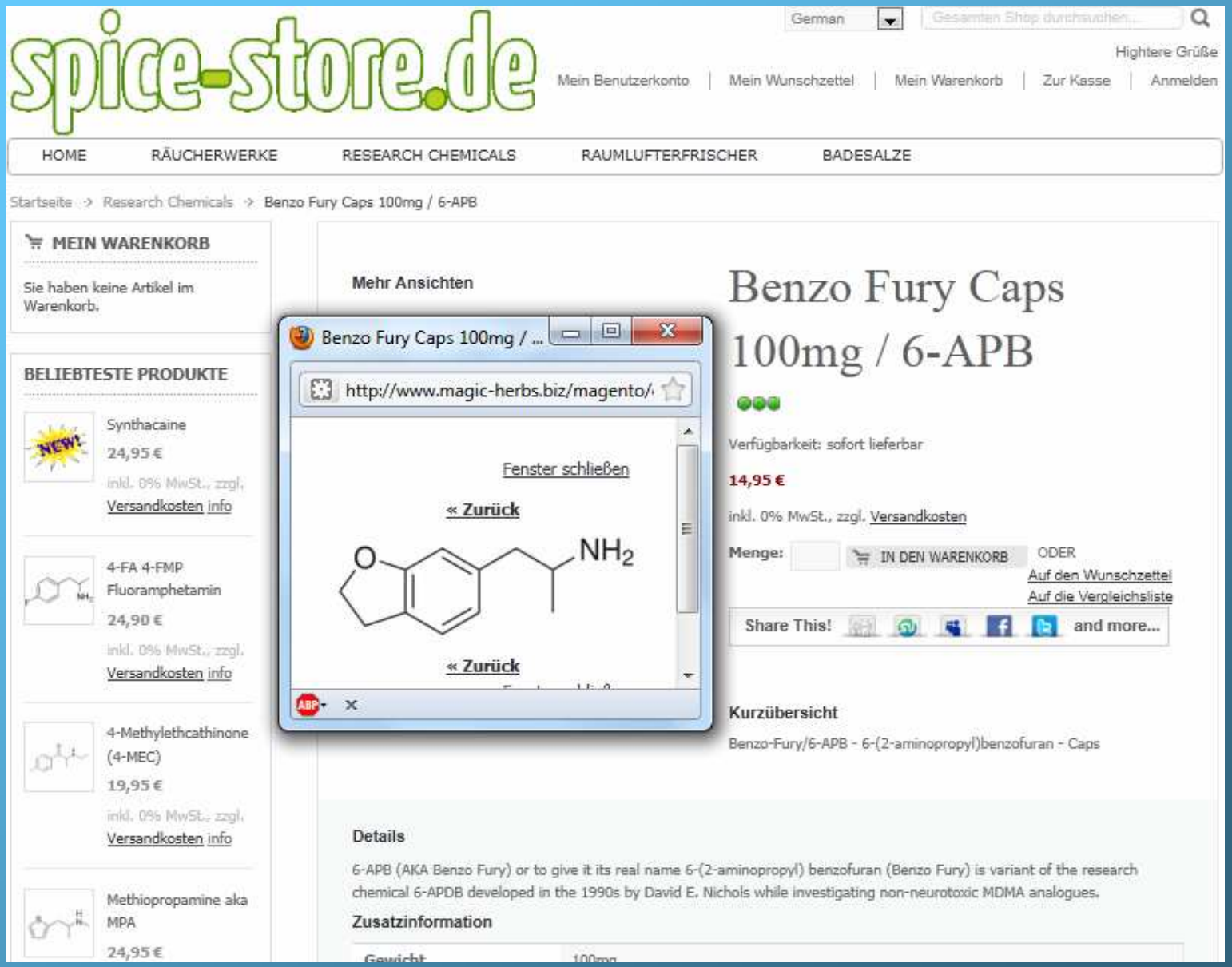
Wir hoffen, es hilft.

Einen schönen Tag noch.



	Cathinonen im Vergleich [Gehe zu Seite: 1, 2]	MindTunE	45	2084	07.06.2011 - 18:44 TrustNoOne
	WARNUNG! 3 Todesfälle nach Konsum von "2C-E"	dea	2	473	27.05.2011 - 06:20 n0ak
	Allgemeines zu Research Chemicals [Gehe zu Seite: 1, 2, 3]	Samichlaus	53	13100	14.05.2011 - 15:45 poiZEN
	[Warnung] Butylon und Morbus Crohn / Colitis ulcerosa	loefchen	5	2315	17.12.2010 - 11:31 larry k
	[WARNUNG]: Dänischer Händler tot durch 2c-b-fly (?) [Gehe zu Seite: 1, 2]	robertnesta	30	2536	16.06.2010 - 21:11 A.Shulgin2
	[Warnung!] Mephedrone mit Benzocaine [Gehe zu Seite: 1, 2]	bluemechind	36	2219	31.05.2010 - 15:53 Raul Duke
	[Warnung] Phenylethylamine und Diabetes	A.Shulgin	13	3836	10.09.2009 - 17:41 loefchen
	md 10	laxmi	21	596	08.06.2011 - 19:33 laxmi
	Erzählt von eurer härtesten nacht!!!!??	Einmalnurnoch	6	160	08.06.2011 - 18:00 Foulfellow
	F1 Tablets (150mg Methylone + 100mg 4-MEC + 10mg MDPV)	MindTunE	16	1043	08.06.2011 - 17:47 totalmassdisorder

Naphyron ist out, 6-APB ist in



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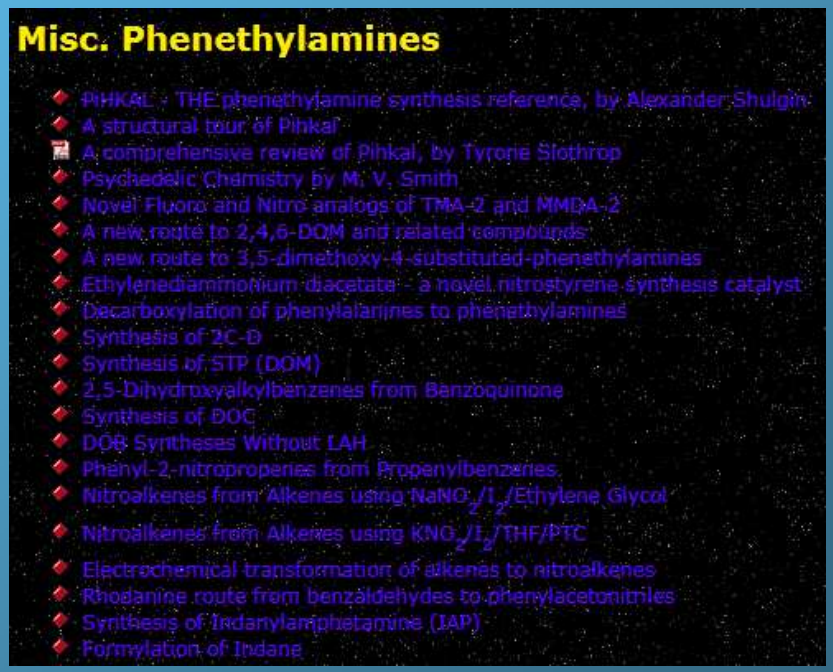

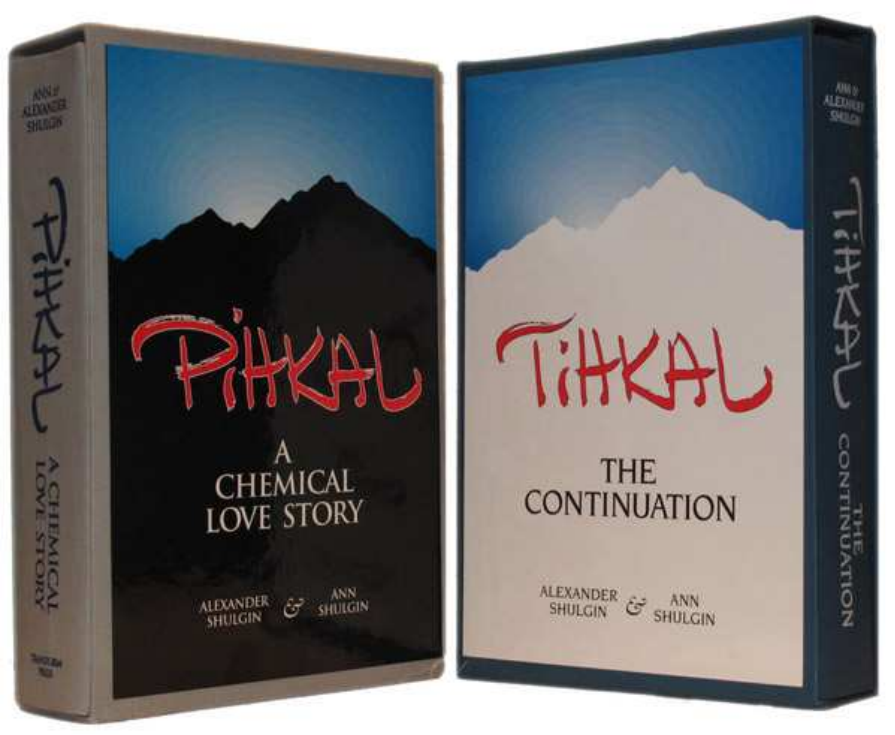
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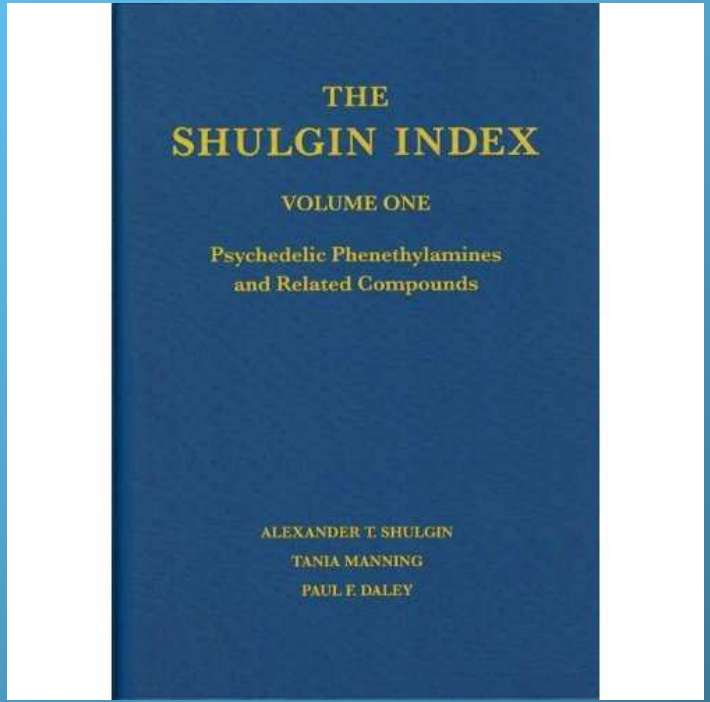
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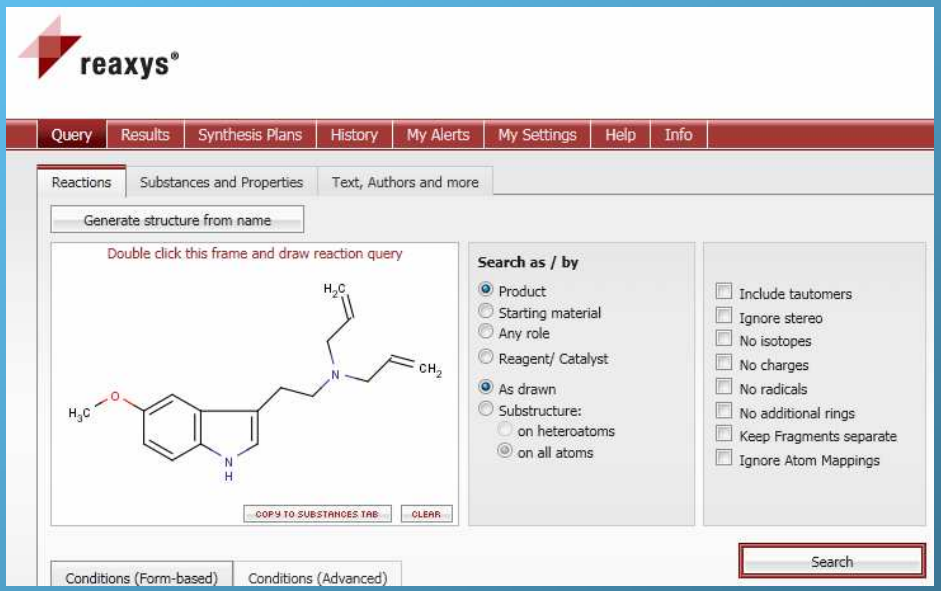
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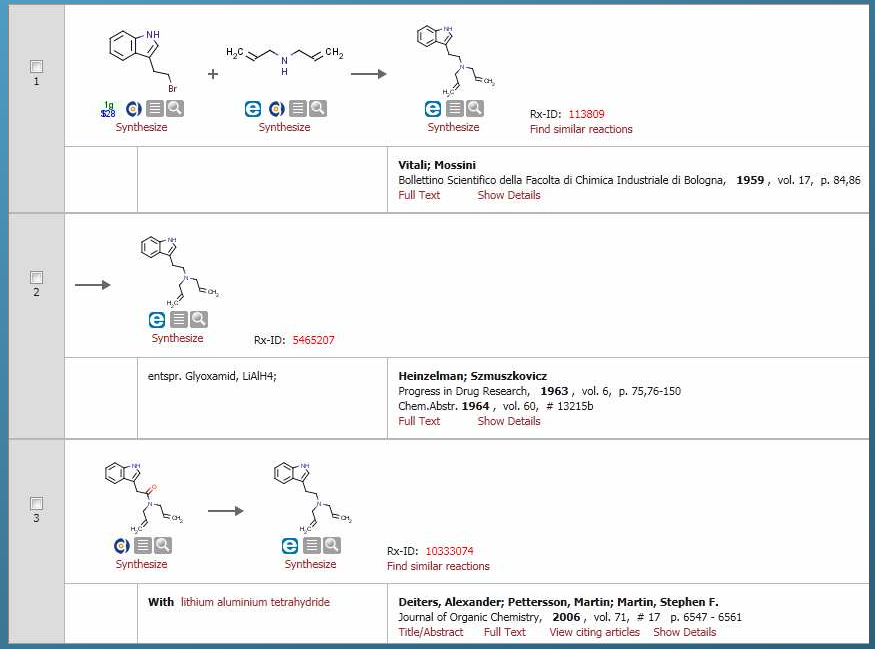
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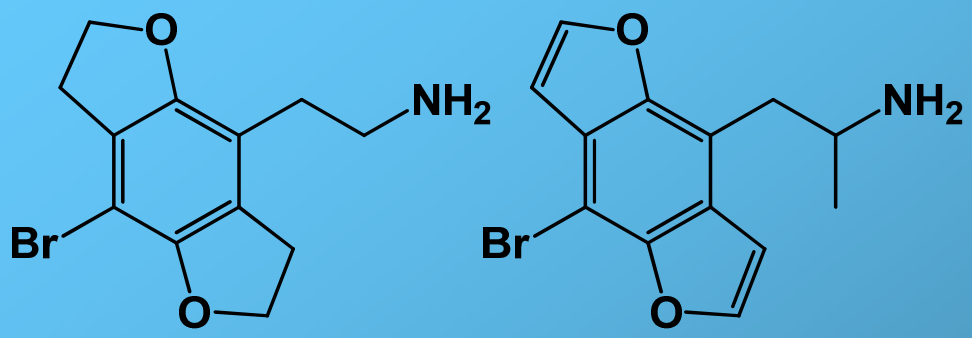

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Zwei Todesfälle auf einer Party in Schweden
→ Überdosis BDF durch Thumbprinting

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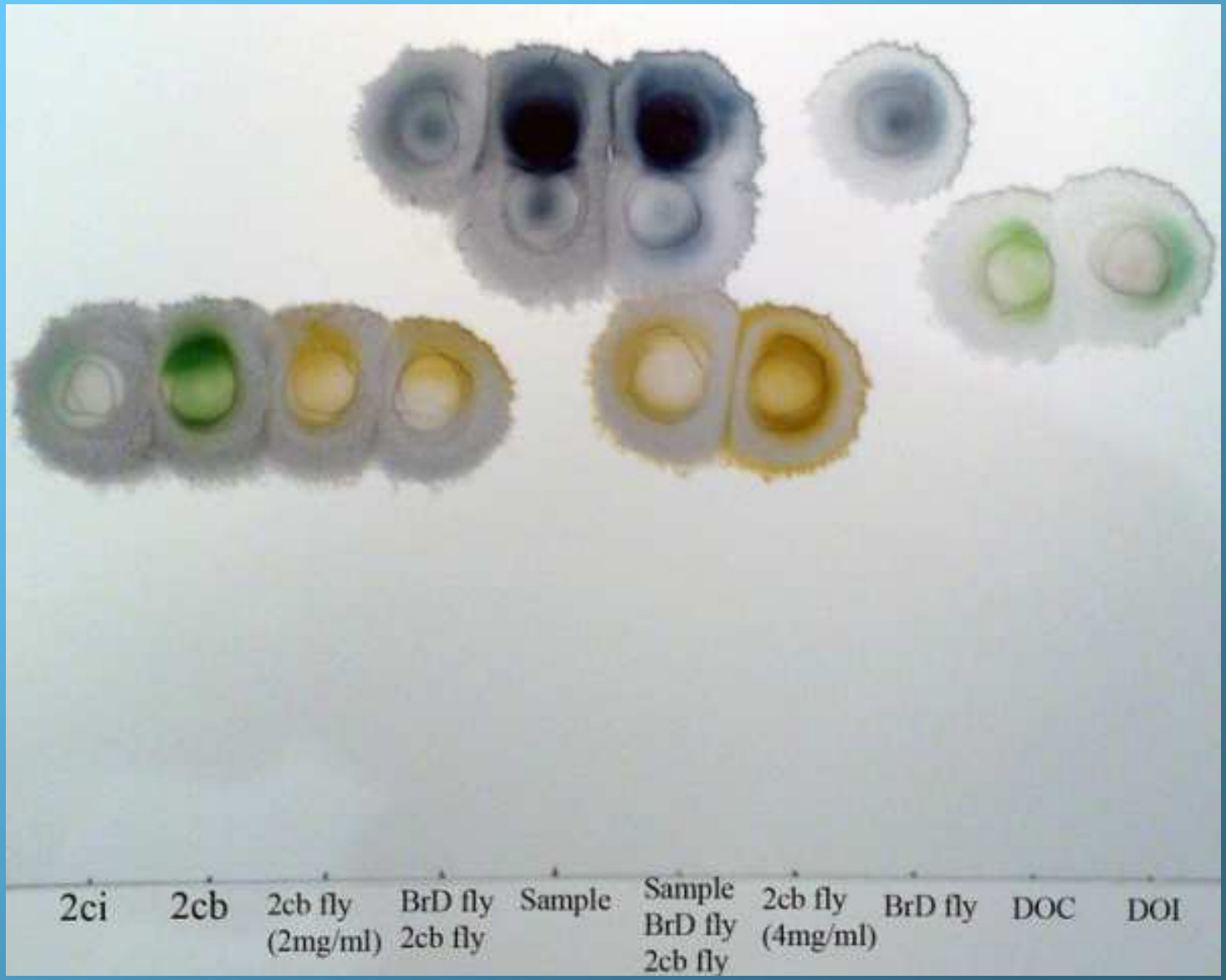
je ein Todesfall in Dänemark und Kalifornien nach dem Konsum von 2C-B-Fly eines dänischen Händlers (Haupt-RC)

weiterer Vorfall in Spanien, Zusammenhang mit Haupt-RC besteht

Probe der Haupt-RC-Batch wird von Energie Control mittels DC analysiert

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