
Bromo-Dragonfly Report

Psychonaut Web Mapping Research Project



The Psychonaut Web Mapping Research Group

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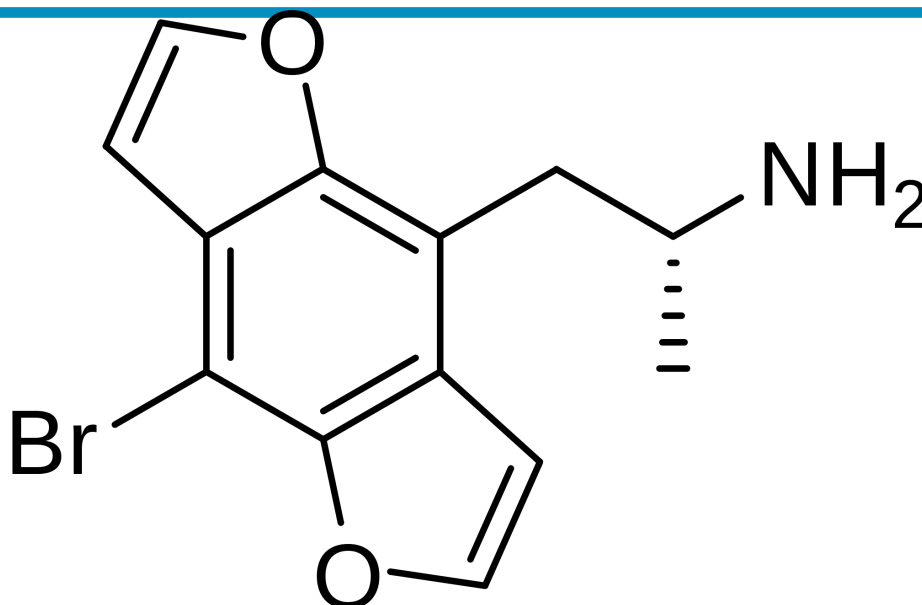
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Please note that the following article on Bromodragonfly, 'Health advances on the risks associated with the online availability of Bromo-Dragonfly (ABDF)' is in preparation.

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THE PSYCHONAUT WEB MAPPING RESEARCH PROJECT

This report has been prepared as part of the Psychonaut WebMapping Project. This is a European Union funded project with the aim of developing a web scanning system to identify and categorise novel recreational drugs/psychoactive compounds, and new trends in drug use based on information available on the Internet.

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Please note that the information in this report reflect a review of the information available online and in other publications (including peer review articles, where available). We have endeavoured to validate this information where possible, however, given the absence of evidenced based literature in many cases, accuracy cannot be guaranteed. All sites and sources used have been appropriately referenced.

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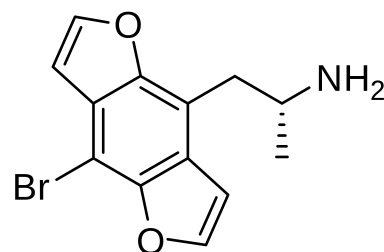
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Bromo-Dragonfly

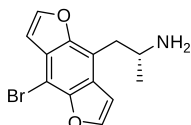
OVERVIEW	
Chemical name	Bromo-benzodifuranyl-isopropylamine
Synonyms/colloquial terms	3C-Bromo-Dragonfly, DOB-Dragonfly, DragonFLY, B-Fly, BrDF, ABDF, FLY, Bromo-benzodifuranile-isopropilammina (I)
Type	Chemical
Origin	Bromo-Dragonfly was first synthesised by Matthew A. Parker in the laboratory of David E. Nichols in 1998 as a novel brain research chemical with rats.
Active constituents	Bromo-benzodifuranyl-isopropylamine
Status	Novel

KEY POINTS

Bromo-Dragonfly is long-lasting (up to 3 days) hallucinogenic drug related to the phenethylamines group. Bromo-Dragonfly was first identified as a new emerging trend of abuse by the Psychonaut Web Mapping Group through searches conducted in Italy, Norway, Belgium, and Finland in 2008. First reported cases of recreational abuse can be traced back to 2001.

CHEMICAL CHARACTERISTICS OF ACTIVE CONSTITUENTS

BROMO-BENZODIFURANYL-ISOPROPYLAMINE



IUPAC Name: 1-(8-bromobenzo[1,2-b;4,5-b']difuran-4-yl)-2-aminopropane

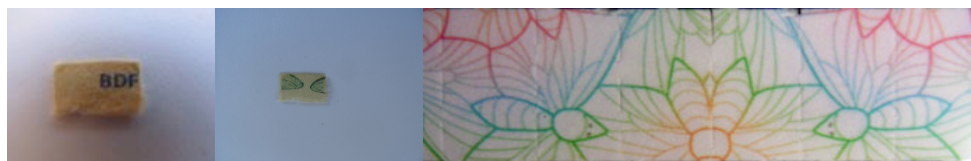
Molecular Formula: $C_{13}H_{12}BrNO_2$

Molecular Weight: 294.14388 [g/mol]

CAS-Number: 10544447

[2]

APPEARANCE OF COMMERCIAL PRODUCTS



[4][7][8]

AVAILABLE INFORMATION ON PURCHASE PRICE

Available on the Internet [9], where is mainly sold in the form of ‘blotter’ (small paper squares). There are two, or possibly more, types of B-Fly available on the Internet. The first one, called the ‘European Batch’ (active at 200 to 500 µg doses) and the least potent called the ‘American Batch’ (active at 800 to 1800 µg doses) (Inaba, 2008).

The average price for 100µg is about €300. A single dose (blotter) is around €10-30.

Other items such as blotter sheets with various artworks, t-shirts (including slogans such as “My friend sold me some bromo-dragonfly today.”), caps, mugs, magnets etc. where found for sale on eBay and Urban Dictionary [12].

Submissions to various crime laboratories as well as forum discussions and similar over the Internet have reported the substance in forms of blotters, powder, liquid (Anonymous 1, 2; [3] [9]) and less frequently as pressed tablets [3].

MODALITIES OF INTAKE

Oral formulation. See doses below [3]:

Oral Bromo-Dragonfly Dosages 2006	
Threshold	500µg
Common	800-1300µg
Strong	1200-1800µg
Heavy	1600+ µg

Oral Bromo-Dragonfly Dosages 2005 “European Batch”	
Threshold	100µg
Common	200-400µg
Strong	500-800µg
Heavy	800+ µg

LEGAL STATUS

Controlled substance in Denmark, Sweden, and Norway [13] [14].

However, it should be noticed that its core structure is highly similar to hallucinogens 4-bromo-2,5-dimethoxyphenethylamine (2C-B) and 4-bromo-2,5-dimethoxyamphetamine (DOB), which are Schedule 1 drugs [13][14] in both Europe and the US. For this reason, it could potentially be prosecuted accordingly.

CURRENT USE/MEDICINAL USE

None.

INFORMATION ON RECREATIONAL USE/MISUSE IN THE EU (OR ELSEWHERE)

B-Fly is becoming increasingly popular at rave and squat parties, where it is sometimes sold as LSD (both substances are sold in the form of bottlers [which could look the same] and have similar effects). Users described its effects as ‘a ride to the moon’ because it “lasts too long and leaves you drained”. They also think it is “definitely not for everyone, just too powerful” [3] [5] [8].

USE IN COMBINATION WITH OTHER COMPOUNDS

Bromo-Dragonfly is taken in combination with the following:

- LSD
- Cannabis
- 2C-B
- Ketamine
- Methylone
- Amphetamines
- Alprazolam
- Cocaine
- Kratom
- Alcohol

PHARMACOLOGICAL CHARACTERISTICS

Very little is known about the pharmacological characteristics of B-Fly. There is some evidence that it has vasoconstrictive properties (Bowen et al., 1983). These are believed to be caused by prolonged stimulation of Alpha-1 adrenergic receptors in the limbs. Activation of local serotonin receptors in blood vessels can also result in vasoconstriction, and bromo-dragonfly is known to be a serotonin agonist (Bowen et al., 1983; [3]).

TOXICOLOGICAL EFFECTS

This drug is potentially very toxic. The risk of overdose is also very high. Particularly relevant is a case reported in a Swedish hospital, where a patient reported convulsions, respiratory problems, liver and kidney failure and lost several fingers and toes, after the oral assumption of an unknown amount of B-fly. He was administered 5 mg diazepam (IV) and norepinephrine (IV). He also suffered from respiratory and metabolic acidosis, which was successfully treated with assisted respiration and fluid replacement.

After several days he also developed acute liver failure and renal failure. His liver failure was short-lived, and his kidneys responded favourably to treatment over the next three weeks (for the full report please refer to Thorlacius et al., 2008). Other incidents have been recorded in Denmark (Andreasen et al., 2009; Ritzau, 2008), Finland, the UK (Wood et al., 2009), and the US. These incidents have often involved young adults who purchased the substance online.



[12]

DESIRED PSYCHOACTIVE EFFECTS

Psychedelic effects similar to those induced by LSD, although it lasts much longer (up to 2-3 days) (The Shroomery, 2009; [3] [4]). According to various users, the onset of its effects after oral ingestion can be delayed for up to 6 hours, which can lead to “double dosing” (the ingestion of another dose of B-FLY thinking that the first dose was inadequate to cause any effects) and/or the use of additional drugs while waiting for the effects to kick in (Inaba, 2008; [3][4][5]).

Accounts of B-FLY’s experiences on the Internet are rather contradictory, with some users claiming strong oral activity at 300 mg (ug), while other claiming that it had no effects at 1.5 mg (1500 ug). [3] [10]

PHYSICAL/MEDICAL UNTOWARD EFFECTS

Physical side effects such as sweating and body temperature fluctuations (hotness and chills) after the assumption of one bottle have been reported (The Shroomery, 2009).

PSYCHOPATHOLOGICAL DISTURBANCES ASSOCIATED WITH ITS USE

Powerful hallucinations, which can last for days [3] [4] [5]. According to some users, it could have a number of other disturbances, which make it a 'third-class psychedelic' such as:

- very low and erratic oral bioavailability
 - very steep dose-response-curve
 - very long, delirium-like trip
 - high anxiogenic potential
- [10, especially the account of C6H6, posted on July 10, 2005]

RELATED FATALITIES

Several fatalities possibly related to overdose of B-FLY have been recorded in Norway, Sweden, and Denmark (Andreasen et al., 2009; Inaba, 2008; Thorlacius et al., 2008).

YOUTUBE VIDEOS

Unlike some novel recreational drugs, such as Salvia Divinorum, there have not been many videos posted to YouTube showing individuals on and/or consuming Bromo-Dragonfly. One video describing Bromo-Dragonfly consumption has been collected here. The videos are not only relevant for their content but also for the accompanying text comments, which often include other subjective user experiences as well as negative reactions from users who do not want to publicise the drug in case the attention may affect its current legal status. Please follow the links to watch the following video posted to YouTube:

Bromo-DragonFLY Trip: This is a shory clip of a regular Youtube poster (Neurosoup) describing the psychedelic effects of Bromo-Dragonfly based on personal experience of consuming the substance in 2001. Video posted October 28, 2009.

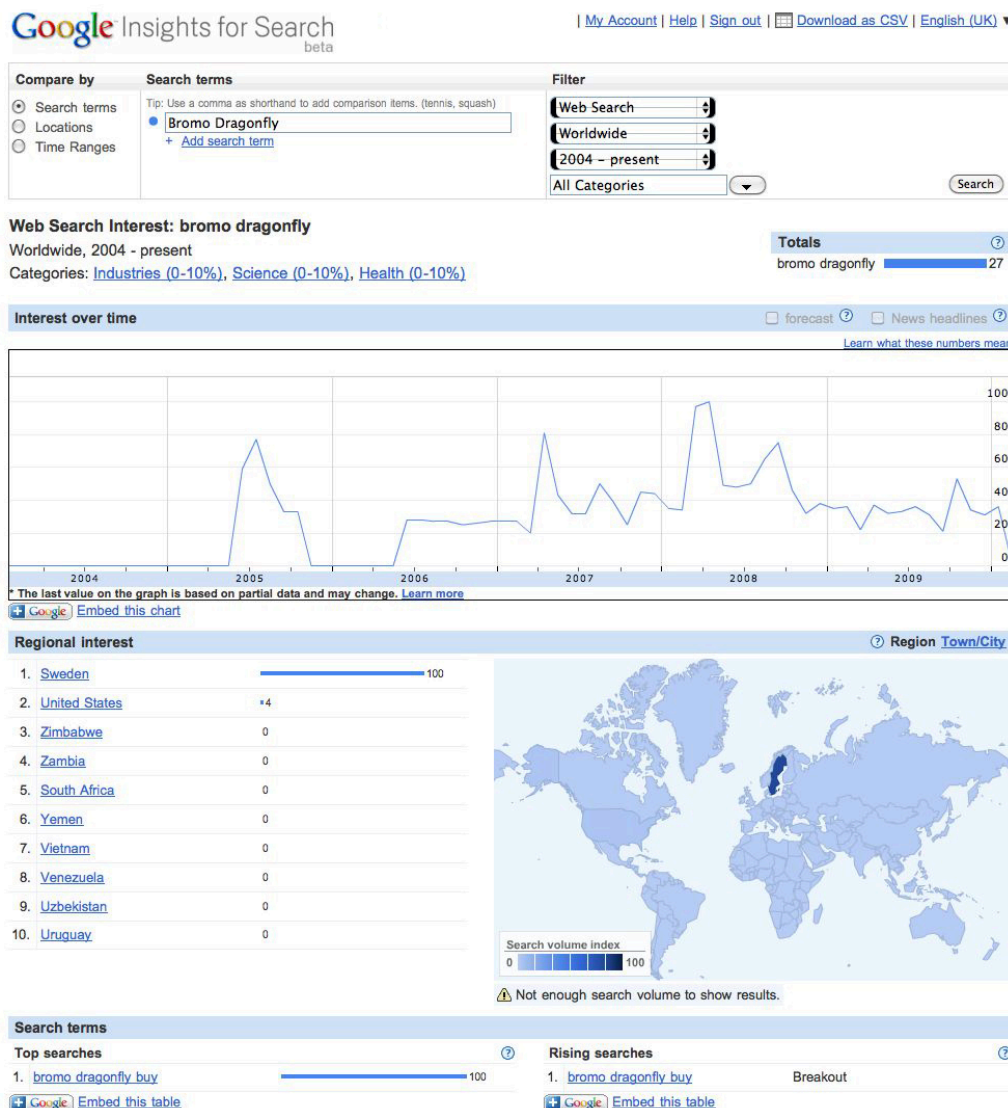
<http://www.neurosoup.com/bromodragonfly.htm> [16]

GOOGLE INSIGHTS

Google Insights for Search shows search volume patterns for specific keywords across specific regions and time frames since 2004. The screenshot below includes a graph with the search volume, indicating interest over time (GMT) for Bromo-Dragonfly, plotted on a scale from 0 to 100; the totals are indicated next to bars by the search terms, a breakdown of how the categories are classified, lists of the top searches and top rising searches, a world heat map graphically displaying the search volume index with defined regions, cities and towns.

Google Insights for Search - Web Search Interest: bromo drago...

02/09/10 03:07 PM



Insights for Search aims to provide insights into broad search patterns. Several approximations are used to compute these results.

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