

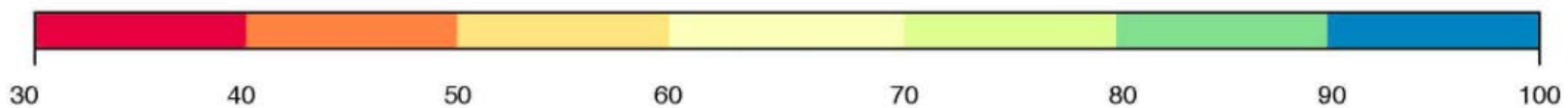
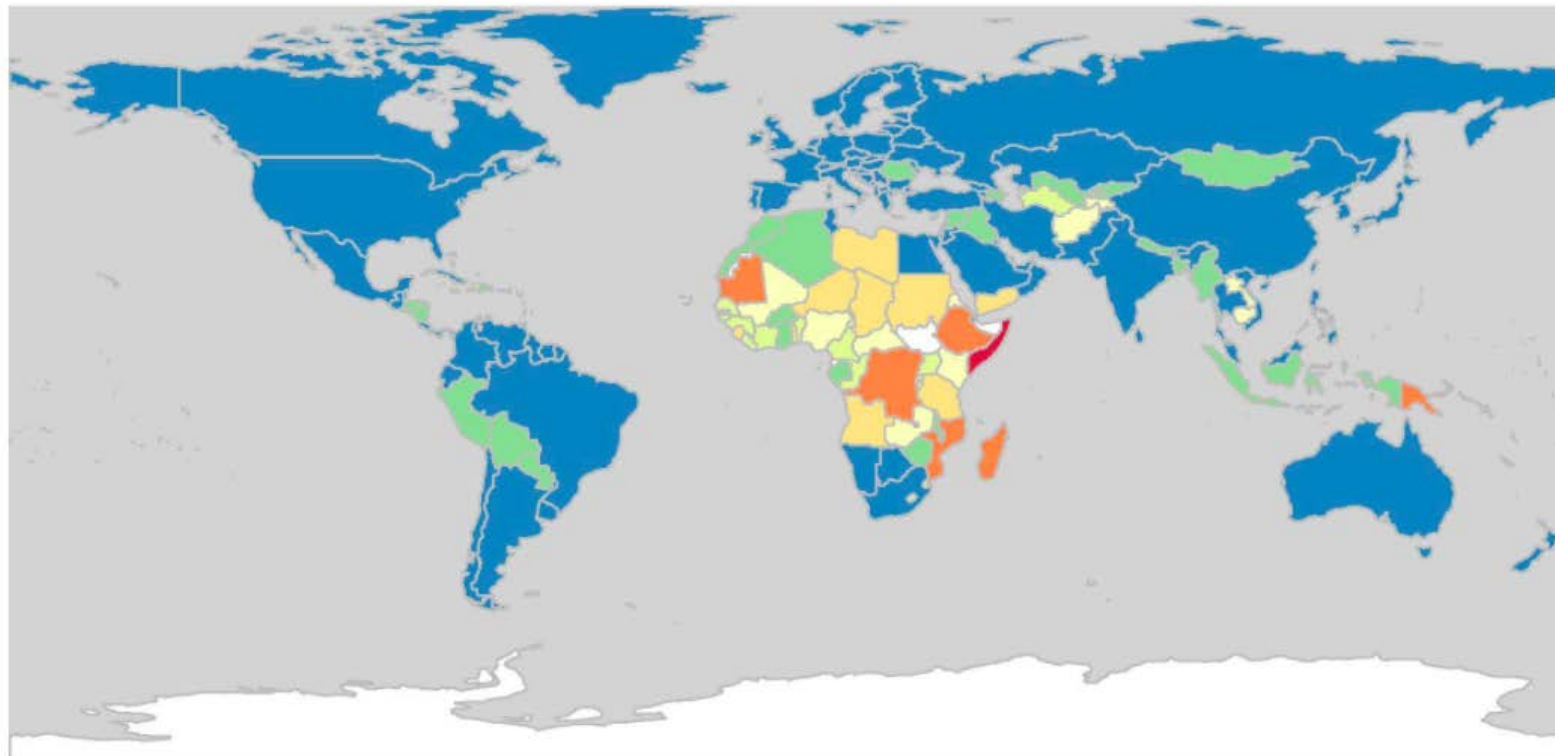
PRIORITNÍ RIZIKOVÉ LÁTKY

Z HLEDISKA POUŽÍVÁNÍ POVRCHOVÝCH VOD JAKO ZDROJŮ PITNÉ VODY

TOMÁŠ CIMR

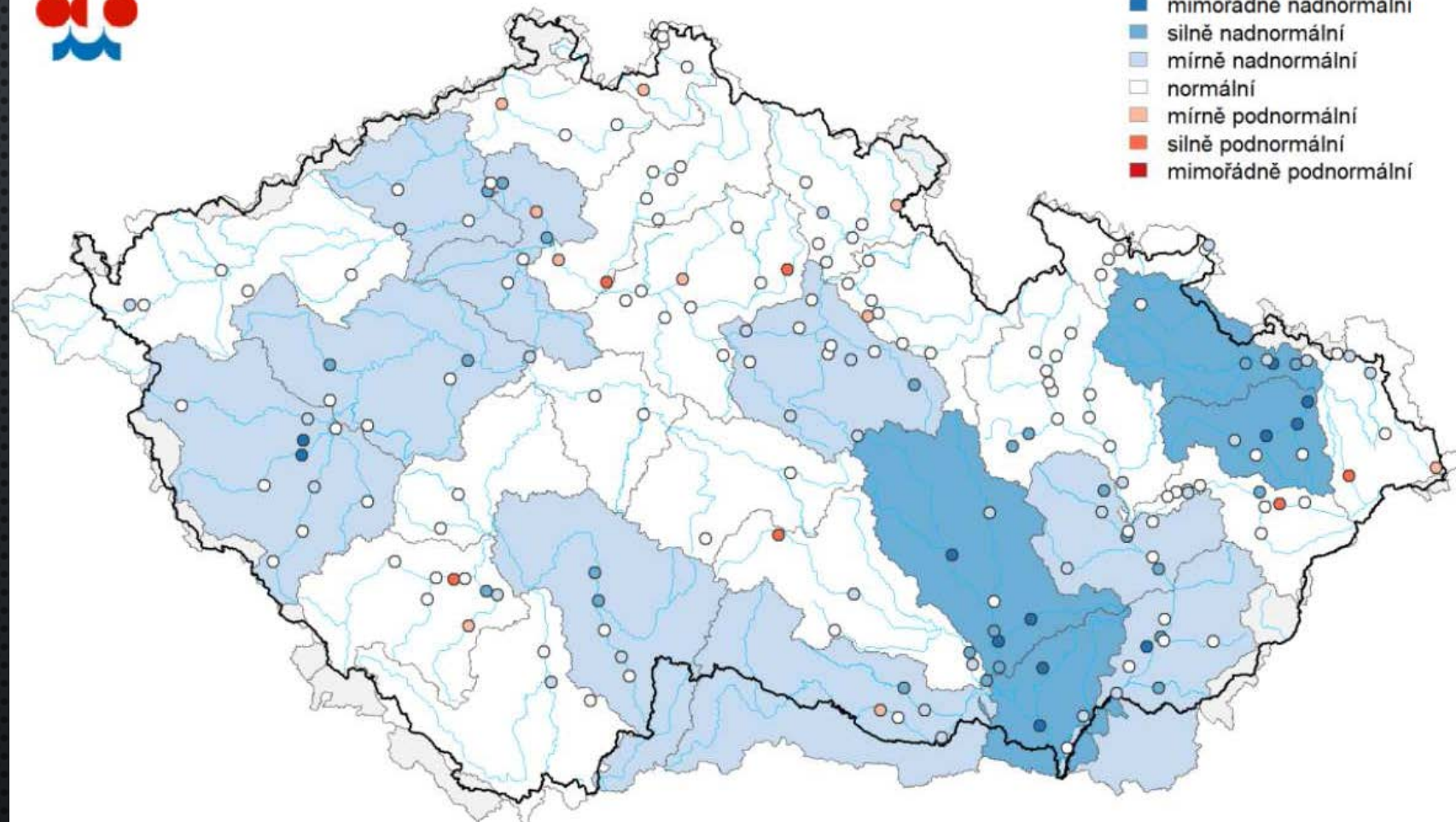
...VODY JE DOST

Global Access to Clean Drinking Water in 2011



Stav hladiny podzemní vody v mělkých vrtech

16. 02. – 22. 02. 2015



SMĚRNICE EVROPSKÉHO PARLAMENTU A RADY
2000/60/ES ZE DNE 23. ŘÍJNA 2000, KTEROU SE STANOVÍ
RÁMEC PRO ČINNOST SPOLEČENSTVÍ V OBLASTI VODNÍ
POLITIKY

SMĚRNICE EVROPSKÉHO PARLAMENTU A RADY
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WATER FRAMEWORK DIRECTIVE

	CAS number	Název látky	Identifikována jako prioritní riziková látka
(1)	15972-60-8	Alachlor	
(2)	120-12-7	Anthracene	(X) (**)
(3)	1912-24-9	Atrazine	(X) (**)
(4)	71-43-2	Benzene	
(5)	not applicable	Brominated diphenylethers (**)	X (***)
(6)	7440-43-9	Cadmium and its compounds	X
(7)	85535-84-8	C10-13-chloroalkanes (**)	X
(8)	470-90-6	Chlorfenvinphos	
(9)	2921-88-2	Chlorpyrifos	(X) (**)
(10)	107-06-2	1,2-Dichloroethane	
(11)	75-09-2	Dichloromethane	
(12)	117-81-7	Di(2-ethylhexyl)phthalate (DEHP)	(X) (**)
(13)	330-54-1	Diluron	(X) (**)
(14)	115-29-7	Endosulfan	(X) (**)
	959-98-8	(alpha-endosulfan)	
(15)	206-44-0	Fluoranthene (****)	
(16)	118-74-1	Hexachlorobenzene	X
(17)	87-68-3	Hexachlorobutadiene	X
(18)	608-73-1	Hexachlorocyclohexane	X
	58-89-9	(gamma-isomer, Lindane)	
(19)	34123-59-6	Isoproturon	(X) (**)
(20)	7439-92-1	Lead and its compounds	(X) (**)
(21)	7439-97-6	Mercury and its compounds	X
(22)	91-20-3	Naphthalene	(X) (**)
(23)	7440-02-0	Nickel and its compounds	
(24)	25154-52-3	Nonylphenols	X
	104-40-5	(4-(para)-nonylphenol)	
(25)	1806-26-4	Octylphenols	(X) (**)
	140-66-9	(para-tert-octylphenol)	
(26)	608-93-5	Pentachlorobenzene	X
(27)	87-86-5	Pentachlorophenol	(X) (**)
(28)	not applicable	Polyaromatic hydrocarbons	X
	50-32-8	(Benzo(a)pyrene)	
	205-99-2	(Benzo(b)fluoranthene)	
	191-24-2	(Benzo(g,h,i)perylene)	
	207-08-9	(Benzo(k)fluoranthene)	
	193-39-5	(Indeno(1,2,3-cd)pyrene)	
(29)	122-34-9	Simazine	(X) (**)
(30)	688-73-3	Tributyltin compounds	X
	36643-28-4	(Tributyltin-cation)	
(31)	12002-48-1	Trichlorobenzenes	(X) (**)
	120-82-1	(1,2,4-Trichlorobenzene)	
(32)	67-66-3	Trichloromethane (Chloroform)	
(33)	1582-09-8	Trifluralin	(X) (**)

33 prioritních látek 8 znečišťujících

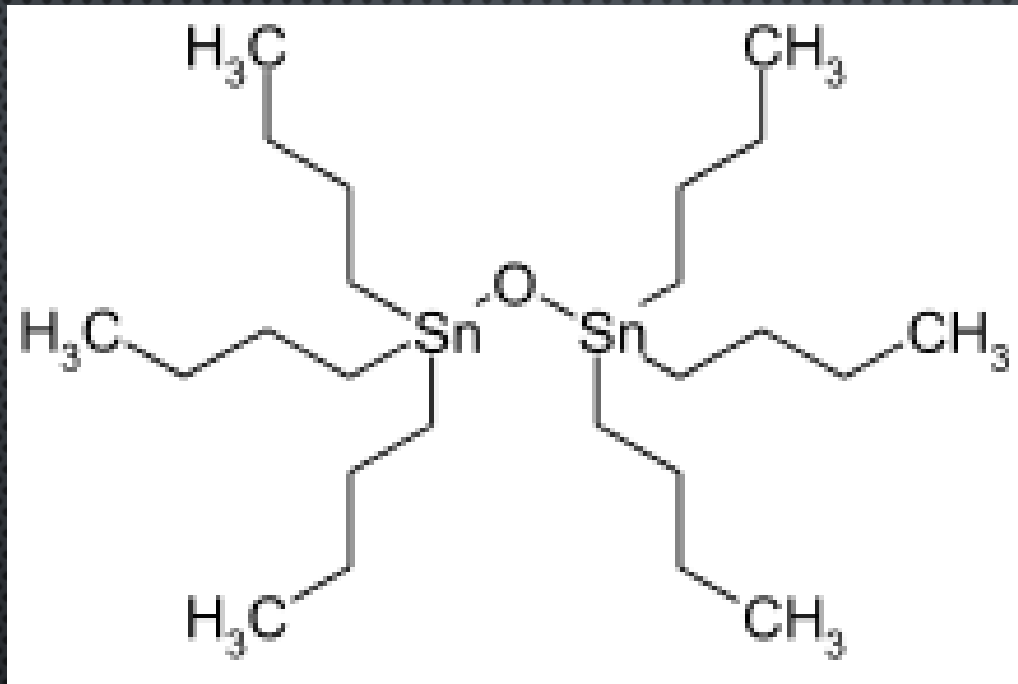
(*) Where groups of substances have been selected, typical individual representatives are listed as indicative parameters (in brackets and without number). The establishment of controls will be targeted to these individual substances, without prejudicing the inclusion of other individual representatives, where appropriate.

(**) These groups of substances normally include a considerable number of individual compounds. At present, appropriate indicative parameters cannot be given.

(***) This priority substance is subject to a review for identification as possible "priority hazardous substance". The Commission will make a proposal to the European Parliament and Council for its final classification not later than 12 months after adoption of this list. The timetable laid down in Article 16 of Directive 2000/60/EC for the Commission's proposals of controls is not affected by this review.

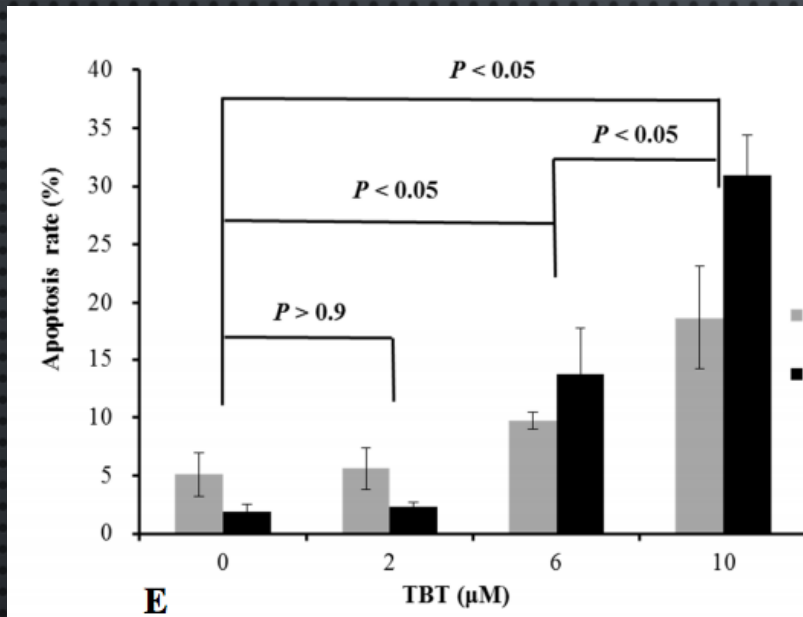
(****) Only Pentabromobiphenylether (CAS-number 32534-81-9).

(*****) Fluoranthene is on the list as an indicator of other, more dangerous Polyaromatic Hydrocarbons. (1) CAS: Chemical Abstract Services. (2) EU-nummer: European Inventory of Existing Commercial Chemical Substances (EINECS) or European List of Notified Chemical Substances

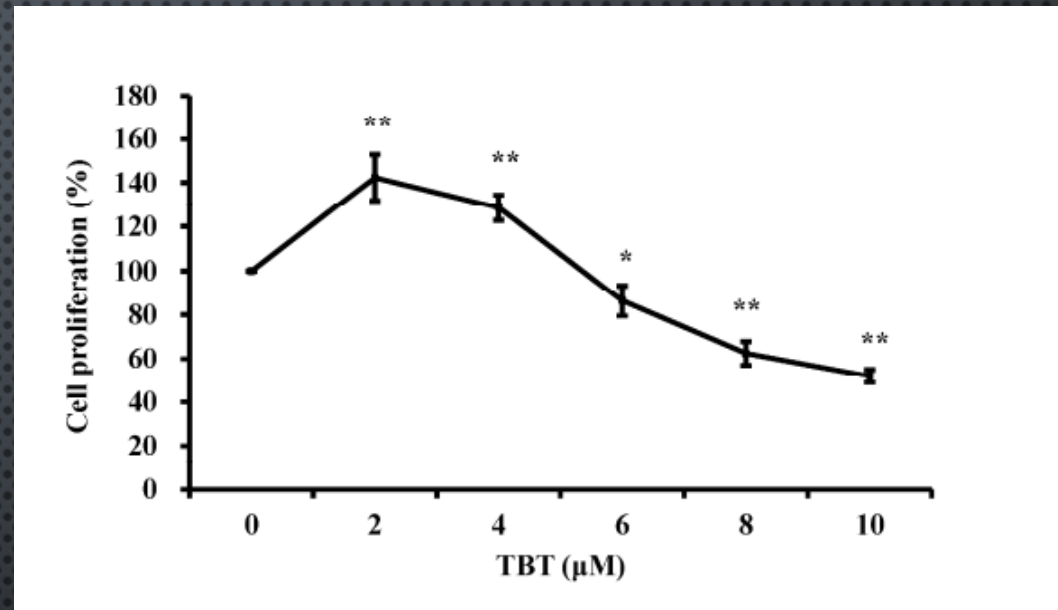


TRIBUTILTIN

MAC 0,0015 µG/L



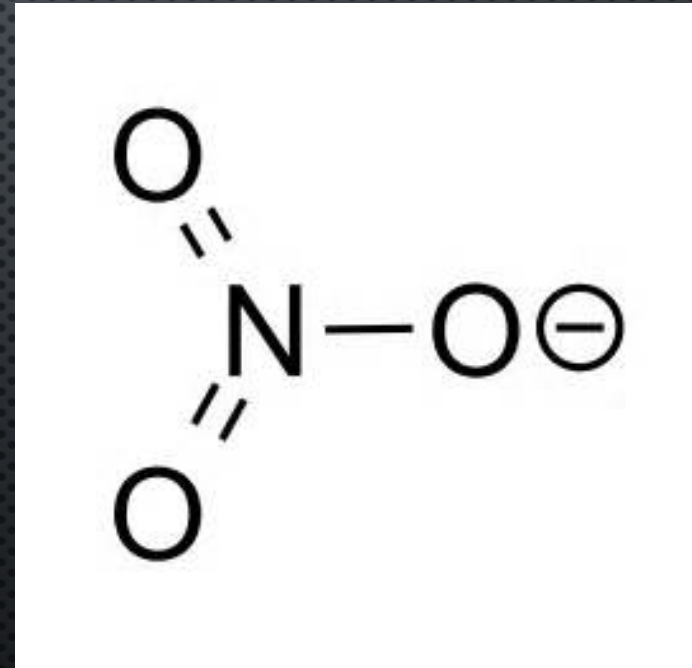
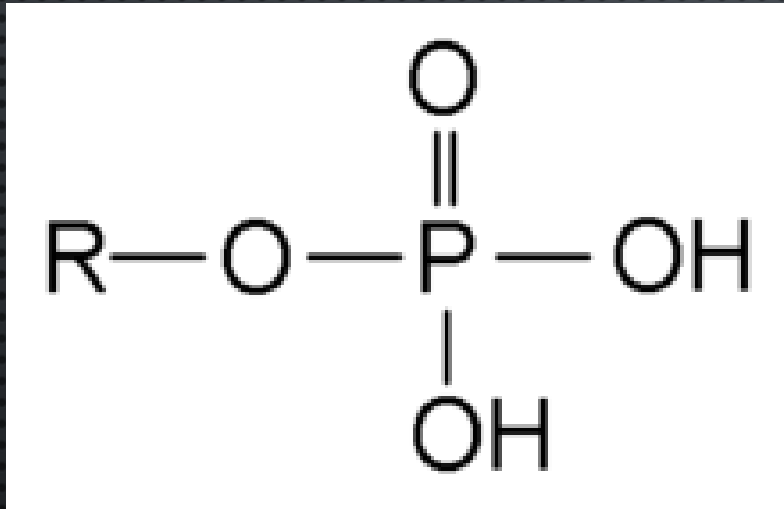
Obrázek 1: Vliv TBT na nárůst apoptózy jaterních buněk. (2016, Mi Zhou et. Al)

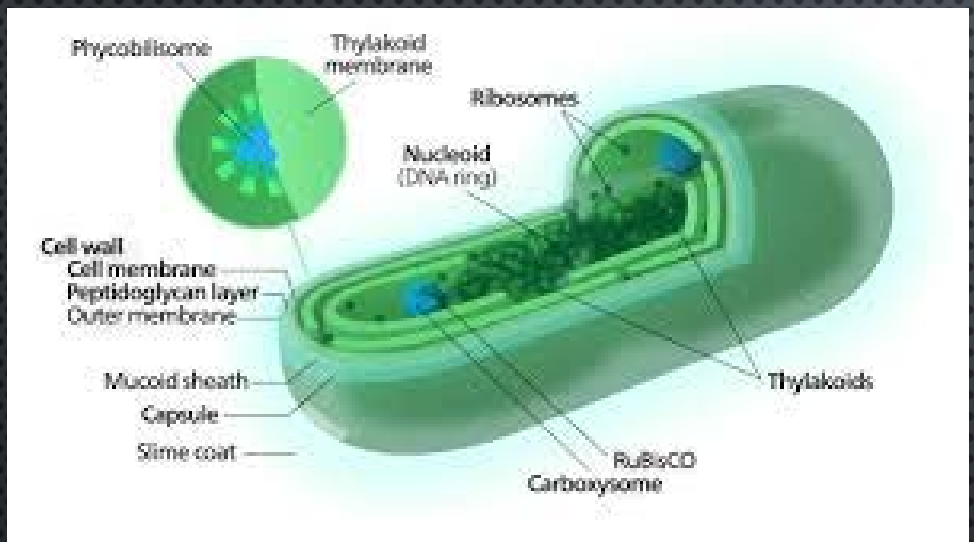


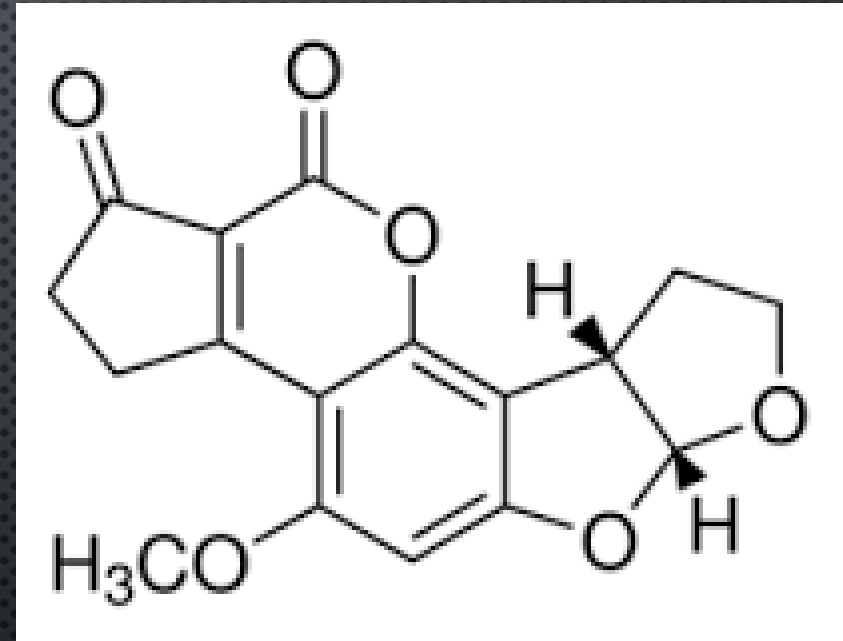
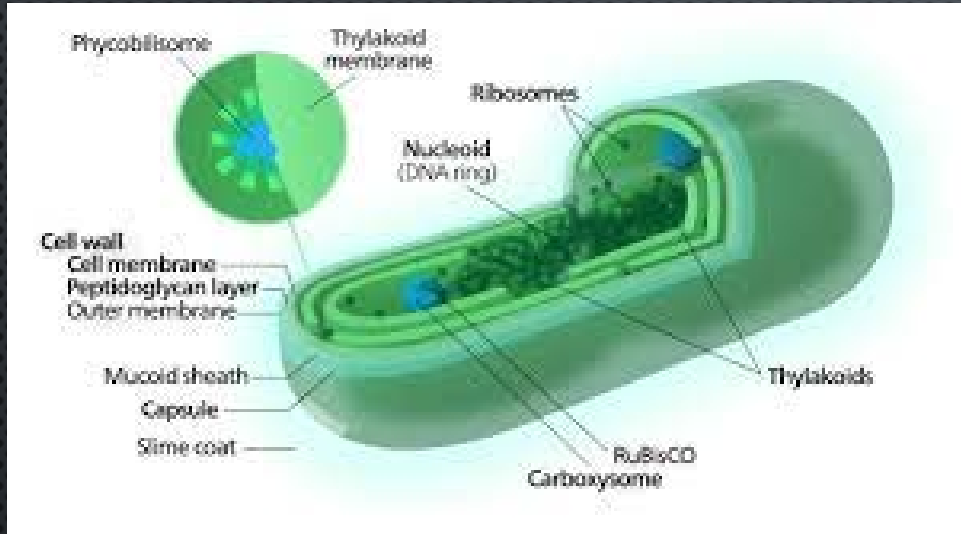
Obrázek 2: Vliv koncentrací TBT na proliferaci jaterních buněk (2016, Mi Zhou et. Al)



EUTROFIZACE







...ZÁVĚREM

....DĚKUJI ZA POZORNOST

DIRECTIVE 2008/105/EC ON ENVIRONMENTAL QUALITY STANDARDS IN THE FIELD OF WATER POLICY
MAXIMUM ALLOWABLE CONCENTRATION FOR SURFACE WATERS (EQC – ENVIRONMENTAL QUALITY STANDARDS,
2008/105/EC)

2016, ALASONATI ET. AL: TOWARDS TRIBUTILIN QUANTIFICATION IN NATURAL WATER AT THE EQS REQUIRED BY THE
WATER FRAMEWORK DIRECTIVE

2016, MI ZHOU ET. AL: TOXICOGENOMIC ANALYSIS IDENTIFIES THE APOPTOTIC PATHWAY AS THE MAIN CAUSE OF
HEPATOTOXICITY INDUCED BY TRIBUTYLTIN

2015, A.T. MATA ET. AL: BOTTLED WATER: ANALYSIS OF MYCOTOXINS BY LC-MS/MS