

Bulletin de veille du réseau d'écotoxicologie terrestre et aquatique



N° 63 Juin 2023

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Edito

Voici notre 63ème bulletin de veille, qui nous espérons toujours informatif !

Nous nous rappelons que les fiches thématiques sont désormais directement consultables et téléchargeables sur le site ECOTOX : <https://www6.inrae.fr/ecotox/Productions/Fiches-thematiques>.

Nous vous rappelons notre PCI pour la soumission de vos preprints : <https://ecotoxenvchem.peercommunityin.org/> Notre PCI monte en puissance.

N'oubliez pas de nous transmettre les informations que vous souhaitez diffuser, notamment vos publications que nous pourrions avoir oubliées. Nous rencontrons actuellement des soucis d'alertes WoS, il se peut que la liste des productions du réseau soit donc incomplète.

L'équipe vous souhaite une bonne lecture de ce bulletin !

Contact : veille-ecotox@inrae.fr

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- Differential allocation of cadmium and zinc in durum wheat during grain filling as revealed by stable isotope labeling
- Is a dissipation half-life of 5 years for chlordecone in soils of the French West Indies relevant? - ScienceDirect

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- Presidency of the EU: Spain must drive key environmental files, Sweden disappoints
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- One Health : quels rôles pour les plantes, l'air, l'eau et le sol ?
- Critical Oversight in EPA's PFAS Rules: Ignoring a Key Contaminant Source
- Pesticides en agriculture conventionnelle versus bio : quelles différences ?
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- Report Adds to Evidence of Widespread PFAS Contamination; Calls for Removal of Products
- Accessing Environmental Chemistry Data via Data Dashboards (AOCS 2023)

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- Autorisation de l'Union pour le produit biocide dénommé «TWP 094»
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- LMR de cyantraniliprole présents dans ou sur certains produits
- LMR de bixafen, de cyprodinil, de fenhexamide, de fencicoxamide, de fenpyroximate, de flutianil, d'isoxaflutole, de mandipropamide, de méthoxyfénozide et de spinetoram
- Autorisation de l'Union pour le produit biocide unique dénommé «Spray On wipes»
- Autorisation pour le produit biocide unique dénommé «Spray On»
- Pesticides : la Commission européenne prolonge les autorisations de plusieurs substances problématiques

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- Peer review of the pesticide risk assessment of the active substance dimethomorph
- Produits phytopharmaceutiques. Normes élevées d'évaluation des risques également en cas de mélanges, selon le BfR
- Substitution des pesticides « plus dangereux » dans l'U.E : installation d'un groupe d'expert

- Vers un traité international sur la pollution par les plastiques : enjeux, options, positions de négociations

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- EPA Announces New Framework to Prevent Unsafe New PFAS from Entering the Market
- The WHO Europe Ministerial Conference on Environment and Health: addressing the triple crisis of climate change, biodiversity loss and environmental pollution on health
- Air pollution in Europe: 2023 reporting status under the National Emission reduction Commitments Directive
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- Trois projets de recherche pour mieux comprendre les effets de la pollution sur la santé des femmes
- Vers un traité mondial pour mettre fin à la pollution plastique : Christophe Béchu et Bérangère Couillard recevront les parties prenantes pour un temps d'échanges - mardi 16 mai à 17h30

REVUE DE PRESSE

- Novel Study Links Glyphosate Exposure to Heart Damage Through Aging and Reduced Creation of Cardiac Muscle Cells
- Pollution chimique et effet cocktail: une piste vers des tests toxicologiques sans expérimentation animale
- Congress Asked to Help Stop Ecosystem Collapse in the Farm Bill by Preserving Local Authority to Restrict Pesticides
- Environmental activists protest at Dutch Tata Steel plant
- 3M offers \$10.3B settlement over PFAS contamination in water systems – now, how do you destroy a 'forever chemical'?
- Endocrine-disrupting chemicals may raise risk of cognitive disorders in future generations, animal study finds
- Prenatal exposure to phthalates may impact future fertility differently in males and females, animal study finds
- Ces dix pesticides favorisent la maladie de Parkinson
- Pollution aux PFAS : les écologistes lyonnais s'opposent à l'amendement pro industrie
- PFAS : des recours pour mieux connaître l'ampleur de la contamination
- Phytosanitaires : une commission d'enquête sur l'échec des plans Ecophyto
- Arsenic contamination of food and water is a global public health concern – researchers are studying how it causes cancer
- World Environment Day: Countries in sub-Saharan African need to work toward a circular economy to reduce plastic waste.
- Traité plastique : ce qu'il faut retenir des négociations parisiennes
- Scientists Identify 97 Pesticides and Flame Retardants in Study of Primate Population
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- [Etude] Persistance inattendue des résidus de pesticides dans les sols en France
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- Une présence généralisée des pesticides dans les sols agricoles de France, selon une étude-pilote
- New Viewpoint of the Historic Link between Endocrine Disrupting Chemicals and Cancer Discussed
- Toxic chemical cocktails found at over 1,600 river and groundwater sites across England
- Scientists Develop Nontoxic Method To Deter Rodents from Eating Planted Seeds in Crop Production
- New Analytical Method Enables Multi-Class Analysis of Pesticides in Corn Products
- New Study Spotlights Ten Pesticides Implicated in Development of Parkinson's
- France court bans two glyphosate-based pesticides

- Agricultural Pesticide Use the Primary Driver of Bird Declines in Europe
- Pesticides : le Sénat donne au gouvernement le pouvoir de suspendre une décision de l'Anses
- Publication de l'Atlas des pesticides en Français
- New model for predicting adsorption of PFAS by microplastics
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- The real-life impact of PFAS pollution on communities – examples from Veneto, Antwerp, Dordrecht, Ronneby and Korsør and how to take action
- Scientists Zero In on “Rapidly Evolving” Human Pathogenic Fungi, May Be Tied to Widespread Fungicide Use
- Règlement Pesticides : Nous dénonçons l'annonce du Président du Parti populaire européen (droite)
- Turning the tide on Europe's water pollution crisis

21/06/2023

The role of ion charge density and solubility in the biosorption of heavy metals by natural biofilm matrix of polluted freshwater: the cases of Mg(II), Cr(VI), and Cu(II)

Authors: Anggayasti WL, Salamah LN, Rizkymaris A et al.

Source: ENVIRONMENTAL POLLUTANTS AND BIOAVAILABILITY 35, 2023, DOI 10.1080/26395940.2023.2220571

Abstract: One major cause of aquatic pollution is the accumulation of heavy metal ions. This review is aimed to examine the application of natural biofilm as biosorbent for Mg(II), Cr(VI), and Cu(II), as an eco-friendly, economical, and efficient remediation strategy. Biofilm matri...

07/06/2023

The response of freshwater plankton communities to temporal concurrence of agrochemical mixtures

Authors: del Arco A, Parra G, Downing AL

Source: LIMNETICA 42:189-202, 2023, DOI 10.23818/limn.42.14

Abstract: Freshwater ecosystems regularly experience pulsed inputs of nutrients and other pollutants as a result of temporally variable applications of agrochemicals combined with runoff events. In this study, we evaluate how planktonic communities respond to repeated and pulsed insecticide disturbances and if the response depends o...

25/05/2023

Prospective observations on benthic marine diatoms taxocoenoses in a port exposed to mining residues

Authors: Martinez YJ, Siqueiros-Beltrones DA, Marmolejo-Rodriguez AJ

Source: HIDROBIOLOGICA 32:319-330, 2022, DOI 10.24275/uam/izt/dcbs/hidro/2022v32n3/Martinez

Abstract: Background. A recent interest has emerged for studying benthic marine diatoms (BMD) whose environment is influenced by potentially toxic elements (PTE), mainly metals that can alter their taxocoenoses parameters and cause deformities in the diatom frustules. Objе...

22/05/2023

Biomass and enzymatic activities of marine bacteria in the presence of multiple metals

Authors: Bitencourt JAP, Chequer LPT, Waite CC et al.

Source: BRAZILIAN JOURNAL OF MICROBIOLOGY Early Access, 2023, DOI 10.1007/s42770-023-00993-5

Abstract: Marine environments are a repository for metals, and humans have enhanced this phenomenon over the years. Heavy metals are notoriously toxic due to their ability to biomagnify in the food chain and interact with cellular components. Nevertheless, some bacteria have physiologica...

22/05/2023

Artificial substrata to assess ecological and ecotoxicological responses in river biofilms: Use and recommendations

Authors: Freixa A, Ortiz-Rivero J, Sabater S

Source: METHODSX 10:102089, 2023, DOI 10.1016/j.mex.2023.102089

Abstract: River biofilms are biological consortia of autotrophs and heterotrophs colonizing most solid surfaces in rivers. Biofilm composition and biomass differ according to the environmental conditions, having different characteristics between systems and even between river habitats. Artificial sub-strata (AS) are an alter...

18/05/2023

Disparate toxicity mechanisms of parabens with different alkyl chain length in freshwater biofilms: Ecological hazards associated with antibiotic resistome

Authors: Liu S, Wang PF, Wang C et al.

Source: SCIENCE OF THE TOTAL ENVIRONMENT 881:163168, 2023, DOI 10.1016/j.scitotenv.2023.163168

Abstract: As emerging organic pollutants, parabens are of global concern because of their ubiquitous presence and adverse effects. However, few researchers have addressed the relationship between parabens' structural features and toxicity mechanisms. This study conducted theoretical calculations and ...

17/05/2023

Individual and combined toxicity of silver nanoparticles and triclosan or galaxolide in the freshwater algae *Euglena* sp.

Authors: Ding TD, Wei LY, Yue ZM et al.

Source: SCIENCE OF THE TOTAL ENVIRONMENT 887:164139, 2023, DOI 10.1016/j.scitotenv.2023.164139

Abstract: With the widespread production and usage, silver nanoparticles (AgNPs) can be extensively found in the aquatic environment and co-exist with other pollutants for a prolonged time, leading to a more complex ecological risk in natural waters. In this work, the model freshwater algae *Euglena* ...

ERA / PUBLICATIONS SCIENTIFIQUES / PLASTIQUES

15/06/2023

Not so dangerous? PET microplastics toxicity on freshwater microalgae and cyanobacteria

Authors: Pencik O, Molnarova K, Durdakova M et al.

Source: ENVIRONMENTAL POLLUTION 329:121628, 2023, DOI 10.1016/j.envpol.2023.121628

Abstract: Microalgae and cyanobacteria are among the most important primary producers and are responsible for the production of 50-80% of the oxygen on Earth. They can be significantly affected by plastic pollution, as the vast majority of plastic waste ends up in rivers and then the oceans. This res...

02/06/2023

Impact of PVC microplastics on soil chemical and microbiological parameters

Source: ENVIRONMENTAL RESEARCH 229(),12

DOI:10.1016/j.envres.2023.115891

Abstract: Microplastics (MPs) are emerging pollutants whose occurrence is a global problem in natural ecosystems including soil. Among MPs, polyvinyl chloride (PVC) is a well-known polymer with remarkable resistance to degradation, and because its recalcitrant nature serious environmental concerns are created during manufacturing and waste disposal. The effect of PVC (0.021% w/w) on chemical and microbial parameters of a...

20/05/2023

Aquatic Microbial Diversity on Plasticsphere: Colonization and Potential Role in Microplastic Biodegradation

Authors: Mishra S, Dash D, Das AP

Source: GEOMICROBIOLOGY JOURNAL Early Access, 2023, DOI 10.1080/01490451.2023.2209750

Abstract: Frequently used protective items during the pandemics are prepared from plastics products, such as polypropylene, polyurethane, polyacrylonitrile, polystyrene, polycarbonate, polyethylene, and polyester. [...] Personal protective equipment's are prepared from different plastic products and the outer most s...

12/05/2023

Growth of marine biofilms and macrofouling organisms on biocide-infused, 3D-printed thermoplastics

Authors: Shimeta J, Wilding-McBride G, Bott NJet al.

Source: FRONTIERS IN MARINE SCIENCE 10, 2023, DOI 10.3389/fmars.2023.1172942

Abstract: 3D printing has become widely used to rapidly prototype and manufacture novel or bespoke objects or replacement components in a wide range of marine industries, engineering, and research. 3D-printed objects are subject to marine biofouling, impacting their operation and longevity. Application o...

08/05/2023

Toxicity Effects of Polystyrene Nanoplastics with Different Sizes on Freshwater Microalgae *Chlorella vulgaris*

Authors: Xiang QQ, Zhou Y, Tan CX

Source: MOLECULES 28, 2023, DOI 10.3390/molecules28093958

Abstract: The ubiquitous nature of plastics, particularly nanoplastics, raises concern about their potential effects on primary producer microalgae. Currently, the impacts and potential mechanisms of nanoplastics on microalgae are not fully understood. In this study, the effects of two plain commercial polystyrene nanoplastics (PS-NPs) with ...

PESTICIDES ET SANTE DES AGRICULTEURS

29/06/2023

Prenatal organochlorine pollutant exposure and risk of schizophrenia in a national birth cohort

Source: NEUROTOXICOLOGY 97 (), 6

DOI: 10.1016/j.neuro.2023.05.010

Abstract: Non-genetic prenatal exposures have been associated with schizophrenia risk. However, the role of prenatal exposure to environmental neurotoxicants in offspring schizophrenia risk has been studied in only limited in-stances. Polychlorinated biphenyls (PCBs) and the pesticide metabolite p,p '-dichlorodiphenyl dichloroethylene (DDE) have been linked to neurodevelopmental outcomes, including impairment...



26/06/2023

Testicular germ cell tumour risk by occupation and industry: a French case-control study - TESTIS | Occupational & Environmental Medicine

Objective Testicular germ cell tumours (TGCT) are the most common cancer in men of working age and its incidence has increased notably over the past 40 years. Several occupations have been identified as potentially associated with TGCT risk. The aim of this study was to further explore the relationship between occupations, industries and TGCT risk in men aged 18–45 years. Methods The TESTIS study is a multicenter case-control study conducted between January 2015 and April 2018 in 20 of 23 univer...

09/06/2023

Harmonized human biomonitoring in European children, teenagers and adults: EU-wide exposure data of 11 chemical substance groups from the HBM4EU Aligned Studies (2014-2021)

Authors: Govarts E, GillTes L, Martin LR, Santonen T et al.

Source: INTERNATIONAL JOURNAL OF HYGIENE AND ENVIRONMENTAL HEALTH 249: 114119, 2023, DOI 10.1016/j.ijheh.2023.114119

Abstract: As one of the core elements of the European Human Biomonitoring Initiative (HBM4EU) a human biomonitoring (HBM) survey was conducted in 23 countries to generate EU-wide comparable HBM data. This survey has built on existing HBM capacity in Europe b...

28/05/2023

Factors affecting urinary organophosphate pesticide metabolite levels among Californian agricultural community members

Authors: Kuiper G, Young BN, WeMott S, Erlandson G et al.

Source: SCIENCE OF THE TOTAL ENVIRONMENT 881: 163362, 2023, DOI 10.1016/j.scitotenv.2023.163362

Abstract: Organophosphate (OP) pesticides are widely used in California for agricultural pest and weed control despite their well-documented adverse health effects among infants, children, and adults. We sought to identify factors affecting urinary OP metabolites among families li...

22/05/2023

Elevated 2,4-dichlorophenoxyacetic acid (2,4-D) herbicide concentrations in the household dust of farmers with recent occupational use: Journal of Occupational and Environmental Hygiene: Vol 0, No 0

Pesticide dust concentrations in homes have been previously associated with occupational and home/garden use of pesticides, hygiene practices, and other factors. This study evaluated the relationsh...

22/05/2023

Pesticide use in banana plantations in Costa Rica-A review of environmental and human exposure, effects and potential risks

Authors: Bruhl CA, Andres MA, Echeverria-Saenz S, Bundschuh M et al.

Source: ENVIRONMENT INTERNATIONAL 2023, DOI 10.1016/j.envint.2023.107877

Abstract: Biodiversity is declining on a global scale. Especially tropical ecosystems, containing most of the planetary biodiversity, are at risk. Agricultural monocrop systems contribute to this decline as they replace original hab-itats and depend on extensive use of synthetic pesticides th...

21/05/2023

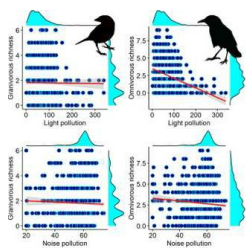
Elevated 2,4-dichlorophenoxyacetic acid (2,4-D) herbicide concentrations in the household dust of farmers with recent occupational use

Authors: Xie S, Hofmann JN, Sampson JN, Josse PR et al.

Source: JOURNAL OF OCCUPATIONAL AND ENVIRONMENTAL HYGIENE 2023, DOI 110.1080/15459624.2023.2198588

Abstract: Pesticide dust concentrations in homes have been previously associated with occupational and home/garden use of pesticides, hygiene practices, and other factors. This study evaluated the relationship between self-reported use of 2,4-dichlorophenoxyacetic acid (2,4-D) an...

PUBLICATIONS DU RESEAU ECOTOX



23/06/2023

Effects of light and noise pollution on avian communities of European cities are correlated with the species' diet

Authors: Morelli F, Tryjanowski P, Ibanez-Alamo JD, Diaz M et al.

Source: Scientific Reports 13(1), 2023, DOI 10.1038/s41598-023-31337-w

Abstract: Urbanization affects avian community composition in European cities, increasing biotic homogenization. Anthropogenic pollution (such as light at night and noise) is among the most important drivers shaping bird use in urban areas, where bird species are mainly attracted by urban greenery. In...

23/06/2023

Insights into the mechanisms of within-species variation in sensitivity to chemicals: A case study using daphnids exposed to CMIT/MIT biocide

Authors: Kim J, Coutellec MA, Lee S, Choi J

Source: Ecotoxicology and Environmental Safety 258: 114967, 2023, DOI 10.1016/j.ecoenv.2023.114967

Abstract: Living organisms adapt to their environment, and this adaptive response to environmental changes is influenced by both genomic and epigenomic components. As adaptation underpins tolerance to stressors, it is crucial to consider biological adaptation in evaluating the adverse outcom...

23/06/2023

The Amphibian Short-Term Assay: Evaluation of a New Ecotoxicological Method for Amphibians Using Two Organophosphate Pesticides Commonly Found in Nature—Assessment of Behavioral Traits - Boualit

Authors: Boualit L, Cayuela H, Ballu A, Cattin L et al.

Source: Environmental Toxicology and Chemistry early access, 2023, DOI 10.1002/etc.5642

Abstract: Neurotoxic pesticides are used worldwide to protect crops from insects; they are recognized to impact nontarget organisms that live in areas surrounded by treated crops. Many biochemical and cell-based solutions have been developed for testing insecticide neurotoxicity. Neverthele...

23/06/2023

Strengths of ecosystem services concept for radiation protection

Authors: Beauquier S, Gilbin R, Billarand Y, Bonzom JM et al.

Source: Radiation Protection Dosimetry 199(8-9): 698-704, 2023 DOI 10.1093/rpd/ncad122

Abstract: The successful ecosystem services concept, defined as the benefits people obtain from ecosystems is still not really reflected in the current approaches for protecting public and environment against radiation promoted by the International Commission on Radiological Protectio...

23/06/2023

Pesticide effects on soil fauna communities—A meta-analysis

Authors: Beaumelle L, Tison L, Eisenhauer N, Hines J et al.

Source: Journal of Applied Ecology, early access, 2023, DOI 10.1111/1365-2664.14437

Abstract: Soil invertebrate communities represent a significant fraction of global biodiversity and play crucial roles in ecosystems. A number of human activities threaten soil communities, in particular intensive agricultural practices such as pesticide use. However, there is currently no ...

23/06/2023

Drivers to improve metal(loid) phytoextraction with a focus on microbial degradation of dissolved organic matter in soils

Authors: Garraud J, Plihon H, Capioux H, Le Guern C et al.

Source: International Journalm of Phytoremediation, early access, 2023, DOI 10.1080/15226514.2023.2221740

Abstract: This review focuses on the available drivers to increase the pool of free (i.e. phytoavailable) metal(loid)s in the soil solution, with a specific focus on the ability of microorganisms to degrade dissolved organic matter for enriching this pool, and then to s...

23/06/2023

Honeybee queen exposure to a widely used fungicide disrupts reproduction and colony dynamic

Authors: Pineaux M, Grateau S, Lirand T, Aupinel P et al.

Source: Environmental Pollution 322: 121131, 2023, DOI 10.1016/j.envpol.2023.121131

Abstract: Pollinators have to cope with a wide range of stressful, not necessarily lethal factors limiting their performance and the ecological services they provide. Among these stressors are pesticides, chemicals that are originally designed to target crop-harming organisms but that also di...



23/06/2023

An alternative approach to assess ecotoxicological effects of agrochemical combinations used in Brazilian aquaculture farms

Authors: Matias VA, Weber AG, Gueretz JS, Walz GC et al.

Source: Environmental Science and Pollution Research 30: 70713–70721, 2023, DOI 10.1007/s11356-023-27414-2

Abstract: Agrochemicals used for treating and preventing aquaculture diseases are usually present in combination with other compounds, and the toxicity resulting from their chemical interactions presents an important reason to assess the ecotoxicity of compound mixtures ...

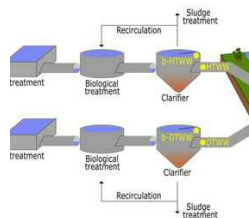
23/06/2023

The ATTAC guiding principles to openly and collaboratively share wildlife ecotoxicology data

Authors: Munoz CC, Charles S, McVey EA, Vermeiren P

Source: MethodsX 10: 101987, 2023, DOI 10.1016/j.mex.2022.101987

Abstract: The inability to quantitatively integrate scattered data regarding potential threats posed by the increasing total amount and diversity of chemical substances in our environment limits our ability to understand whether existing regulations and management actions sufficiently protect wildlife. Systematic lit...



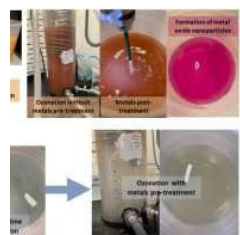
23/06/2023

Evidence of Bacterial Community Coalescence between Freshwater and Discharged tpm-Harboring Bacterial Taxa from Hospital and Domestic Wastewater Treatment Plants among Epilithic Biofilms

Authors: Bouchali R, Marjolet L, Mondamert L, Chonova T et al.

Source: Microorganisms 11(4): 922, 2023, DOI 10.3390/microorganisms11040922

Abstract: The ability of WWTP outflow bacteria at colonizing rock surfaces and contributing to the formation of river epilithic biofilms was investigated. Bacterial community structures of biofilms (b-) developing on rocks exposed to treated wastewaters (TWW) of a hospital (HTWW) and a domestic ...



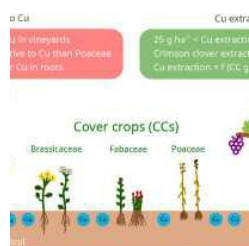
23/06/2023

Influence of ozone microbubble enhanced oxidation on mine effluent mixes and *Daphnia magna* toxicity

Authors: Ryskie S, Belanger E, Neculita CM, Couture P et al.

Source: Chemosphere 329: 138559, 2023, DOI 10.1016/j.chemosphere.2023.138559

Abstract: The mining industry often must mix different kinds of water on the mine site during pre-treatment or posttreatment before the final discharge of the treated water to the environment. Microbubble ozonation has proven to be efficient in the removal of contaminants of concern from mine wat...



23/06/2023

Cover crop response to increased concentrations of copper in vineyard soils: Implications for copper phytoextraction

Authors: Eon P, Robert T, Goutouly JP, Aurelle V et al.

Source: Chemosphere 329: 138604, 2023, DOI 10.1016/j.chemosphere.2023.138604

Abstract: The use of cover crops (CCs) in viticulture is threatened by the contamination of vineyard soils by copper (Cu). This study investigated the response of CCs to increased

concentrations of Cu in soil as a way to assess their sensitivity to Cu and their Cu phytoextraction ability. Our first ex...



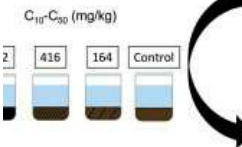
23/06/2023

Metal Contamination and Biomarkers in *Cerastoderma glaucum*: A Multi-level Approach

Authors: Karray S, Marchand J, Geffard A, Rebai T et al.

Source: Archives of Environmental Contamination and Toxicology 84: 484–503, 2023, DOI 10.1007/s00244-023-00999-y

Abstract: In this study, we focused on evaluating the responses of the cockle, *Cerastoderma glaucum* to in situ exposures to metals at three sites in the Gulf of Gabes in the coastal zone of Tunisia differing in levels of metal contamination. Firstly, we examined th...



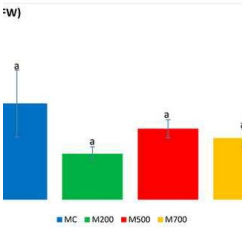
19/05/2023

Toxicity and risk management of oil-spiked sediments by diluted bitumen for two freshwater benthic invertebrates

Authors: Indiketi N, Lhoste E, Grenon MC, Gagnon M et al.

Source: Environmental Pollution 327: 121497, 2023, DOI 10.1016/j.envpol.2023.121497

Abstract: Diluted bitumen (dilbit) is an unconventional oil produced by the oil sands industry in Canada. Despite the knowledge available on hydrocarbon toxicity, the effects of diluted bitumen on benthic organisms are still largely unknown. Moreover, in Quebec there are only provisional thre...



19/05/2023

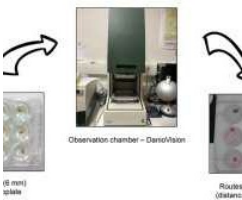
Plants | Free Full-Text | Evaluation of *Miscanthus x giganteus* Tolerance to Trace Element Stress: Field Experiment with Soils Possessing Gradient Cd, Pb, and Zn Concentrations

Authors: Bastia G, Al Souki KS, Pourrut B

Source: Plants-Basel Volume 12(7): 1560, 2023, DOI 10.3390/plants12071560

Abstract: *Miscanthus x giganteus* demonstrated good phytostabilization potentials by decreasing the trace elements (T.E.s) mobility and enhancing the degraded soil quality. Nevertheless, most of the published work was performed under controlled conditions in ex situ pot experiments and/or with soils being spiked. Henc...

of stress effects on freshwater pearl mussel (FW



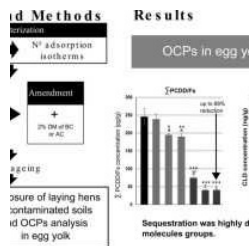
19/05/2023

Locomotion behavior of juveniles of the freshwater pearl mussel *Margaritifera margaritifera*: A new non-invasive tool for the evaluation of stress effects

Authors: Belamy T, Legeay A, Cachot J, Clerandeanu C et al.

Source: Chemosphere 327: 138521, 2023, DOI 10.1016/j.chemosphere.2023.138521

Abstract: The lack of knowledge about the sensitivity of the endangered freshwater pearl mussel (FWPM) *Margaritifera margaritifera* to environmental pollution and the rapid decline of its populations in Europe, have led to the need of developing non-destructive experimental protocols in order to ass...



19/05/2023

Organochlorine POPs sequestration strategy by carbonaceous amendments of contaminated soils: Toward a better understanding of the transfer reduction to laying hens

Source: El Wanny N, Le Roux Y, Fournier A, Baroudi et al.

Source: Journal of Hazardous Materials 434: 128871, 2023, DOI 10.1016/j.jhazmat.2022.128871

Abstract: PCBs, PCDD/Fs, and Chlordecone (CLD) are POPs found in soils and transferred to animals through involuntary soil ingestion. In this frame, the amendment of contaminated soil with porous matrices, like Biochars (BCs) and Activated Carbons (ACs), is a promising technique for r...

19/05/2023

In Vivo Mercury (De)Methylation Metabolism in Cephalopods under Different pCO₂ Scenarios

Authors: Gentes S, Minet A, Lopes C, Tessier E et al.

Source: Environmental Science and Technology 57(14): 5761–5770, 2023, DOI 10.1021/acs.est.2c08513

Abstract: This work quantified the accumulation efficiencies of Hg in cuttlefish, depending on both organic (MeHg) and inorganic (Hg(II)) forms, under increased pCO₂ (1600 μatm). Cuttlefish were fed with live shrimps injected with two Hg stable isotopic tracers (Me²⁰²Hg and ¹⁹⁹Hg(...



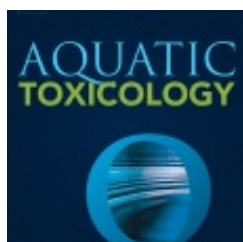
19/05/2023

PBTK modeled perfluoroalkyl acid kinetics in zebrafish eleutheroembryos suggests impacts on bioconcentrations by chorion porosity dynamics

Authors: Billat PA, Vogs C, Blassiau C, Brochot C et al.

Source: Toxicology In Vitro 89: 105588, 2023, DOI 10.1016/j.tiv.2023.105588

Abstract: The zebrafish eleutheroembryo (zfe) is widely used as a model to characterize the toxicity of chemicals. However, analytical methods are still missing to measure organ concentrations. Therefore, physiologically-based toxicokinetic (PBTK) modeling may overcome current limitations to help unde...



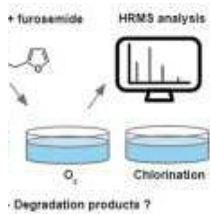
19/05/2023

Assessing the effects of silver nanoparticles on the ecophysiology of Gammarus roeseli

Authors: Andrei J, Guerold F, Bouquerel J, Devin S et al.

Source: Aquatic Toxicology 256: 106421, 2023, DOI 10.1016/j.aquatox.2023.106421

Abstract: Being part of the macrobenthic fauna, gammarids are efficient indicators of contamination of aquatic ecosystems by nanoparticles that are likely to sediment on the bottom. The present study investigates the effects of silver nanoparticles (nAg) on ecophysiological functions in Gammarus ...



19/05/2023

Occurrence and fate of an emerging drug pollutant and its by-products during conventional and advanced wastewater treatment: Case study of furosemide

Occurrence and fate of an emerging drug pollutant and its by-products during conventional and advanced wastewater treatment: Case study of furosemide

Authors: Sandre F, Huynh N, Caupos E, El-Mrabet L et al.

Source: Chemosphere 322: 138212, 2023, DOI 10.1016/j.chemosphere.2023.138212

Abstract: Conventional wastewater treatment systems are not designed to remove pharmaceutical compounds from wastewater. These compounds can be d...



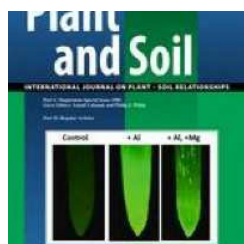
04/05/2023

A Novel Lepidoptera bioassay analysed using a reduced GUTS model

Authors: Badder C, Bart S, Robinson A, Hesketh H et al.

Source: Ecotoxicology and Environmental Safety 251: 114504, 2023, DOI 10.1016/j.ecoenv.2023.114504

Abstract: Lepidopteran species can be both pests and also beneficial pollinators for agricultural crops. However, despite these important roles, the effects of pesticides on this diverse taxa are relatively understudied. To facilitate the assessment of pesticides and other chemic...



04/05/2023

Differential allocation of cadmium and zinc in durum wheat during grain filling as revealed by stable isotope labeling

Authors: Yan BF, Nguyen C, Cornu JY, Schoenholzer-Mauclaire L et al.

Source: Plant and Soil 2023, DOI 10.1007/s11104-023-06005-7

Abstract: Background and aims Cereals can be made safer and more nutritious by reducing cadmium (Cd) and enhancing zinc (Zn) levels. To respectively regulate the accumulation of these chemically similar elements in grains, it is essential to understand the differences between Cd and Zn allocation to grains...



04/05/2023

Is a dissipation half-life of 5 years for chlordecone in soils of the French West Indies relevant? - ScienceDirect

Authors: Saaidi PL, Grunberger O, Samouelian A, Le Roux Y et al.

Source: Environmental Pollution 324: 121283, 2023, DOI 10.1016/j.envpol.2023.121283

Abstract: Recently, Comte et al. (2022) re-examined the natural degradation of chlordecone (CLD) in the soils of the French West Indies (FWI) by introducing an additional 'dissipation parameter' into the WISORCH model developed by Cabidoche et al. (2009). Recent data sets of CLD concen...

30/06/2023

Presidency of the EU: Spain must drive key environmental files, Sweden disapproves

Spain is taking on the rotating 6-month Council Presidency of the EU from July, amidst the illegal Russian war in Ukraine and energy and inflation crises [...]

eeb.org

29/06/2023

Europe's mirror measures on pesticides fail to stop toxic practices, new report reveals

Mirror measures on pesticides affect only half of the neonicotinoids banned in Europe. Loopholes in current EU regulation also allow for the continued export of banned pesticides as well as the import of products grown using them, according to a new joint analysis by the Veblen Institute, the European Environmental Bureau and the Fondation pour la Nature et l'Homme.

eeb.org

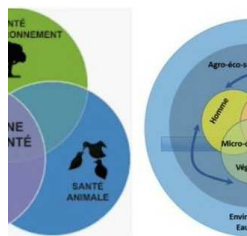


20/06/2023

Nouveau rapport sur les pesticides ARNi

POLLINIS publie un rapport sur les dangers des pesticides génétiques ARNi. Présentés comme des alternatives durables, ils pourraient avoir des effets imprévus potentiellement catastrophiques pour les pollinisateurs.

www.pollinis.org

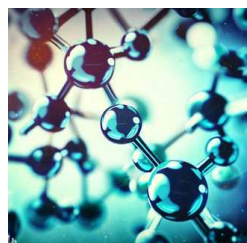


20/06/2023

One Health : quels rôles pour les plantes, l'air, l'eau et le sol ?

L'approche « une seule santé » (One Health) promeut une vision systémique de la santé globale prenant en compte les interactions entre humains, animaux et environnement. L'Académie d'agriculture de France (AAF) a publié le 25 avril 2023 un rapport discutant de ce dernier aspect, moins étudié : la santé des plantes et de l'environnement (sol, eau, air).

www.veillecep.fr



04/06/2023

Critical Oversight in EPA's PFAS Rules: Ignoring a Key Contaminant Source

A recent study conducted by Harvard found that unmonitored PFAS can accumulate and last for centuries. Earlier in the year, the United States Environmental Protection Agency proposed the maximum allowable levels of six PFAS (per- and polyfluoroalkyl substances), also known as "forever chemicals," in potable water. However, these provisional regulations don't cover half of the PFAS found at pollution sites nationwide.

scitechdaily.com



30/05/2023

Pesticides en agriculture conventionnelle versus bio : quelles différences ?

Génération Futures publie un nouveau rapport comparant la dangerosité des pesticides autorisés et employés en agriculture 'conventionnelle' et ceux employés en agriculture « biologique ».

www.generations-futures.fr

05/05/2023

ICTA-UAB demands the European Parliament to take action to fight pollution in the Mediterranean Sea

The implementation of effective policies at local and regional level, and the cooperation of all countries in the Mediterranean Sea basin is urgently needed to successfully reverse the environmental problems in this marine area. This is evidenced by a report carried out by the Institute of Environmental Science and Technology of the Universitat Autònoma de Barcelona (ICTA-UAB) presented in the European Parliament by oceanographer Patrizia Ziveri, who stresses the need to urgently fight against th...

www.eurekalert.org

04/05/2023

Report Adds to Evidence of Widespread PFAS Contamination; Calls for Removal of Products

One of the most widely used insecticides in California, Intrepid 2F, contains harmful levels of per- and polyfluoroalkyl substances (PFAS), or "forever chemicals," according to a report by the Center for Biological Diversity (CBD) and Public Employees for Environmental Responsibility (PEER). In fact, 40 percent of pesticide products in the report tested positive for high levels of PFAS. PFAS are common in non-stick cookware, cleaning/personal care products, food packaging, and other consumer prod...

beyondpesticides.org

03/05/2023

Accessing Environmental Chemistry Data via Data Dashboards (AOCS 2023)

Williams, A. Accessing Environmental Chemistry Data via Data Dashboards (AOCS 2023). AOCS, Denver, CO, April 30 - May 03, 2023. <https://doi.org/10.23645/epacomptox.22728581>

As part of its mission the Center for Computational Toxicology and Exposure (CCTE) at the US Environmental Protection Agency delivers access to chemicals related data via online Dashboards. The CompTox Chemicals Dashboard (available at <https://comptox.epa.gov/dashboard>) provides access to >1.2 million chemicals and...

cfpub.epa.gov

REGLEMENTATION



28/06/2023

Qualité de l'air : vers un alignement des normes européennes sur celles de l'OMS

Mardi 27 juin, [...] les députés de la commission de l'environnement du Parlement européen ont adopté une position de révision de la directive sur la qualité de l'air, un peu plus ambitieuse que celle de la Commission européenne, présentée en octobre 2022. Pour plusieurs polluants, dont les particules fines (PM2,5 et PM10), le dioxyde d'azote, le dioxyde de soufre et l'ozone, les eurodéputés proposent ainsi de se rapprocher progressivement et régulièrement des normes les plus récentes de l'OMS, a...

27/06/2023

PFAS : 5 000 exploitants d'ICPE tenus de les rechercher dans leurs rejets aqueux

Arrêté du 20 juin 2023 relatif à l'analyse des substances per- et polyfluoroalkylées dans les rejets aqueux des installations classées pour la protection de l'environnement relevant du régime de l'autorisation

05/06/2023

Autorisation de l'Union pour le produit biocide dénommé «TWP 094»

RÈGLEMENT D'EXÉCUTION (UE) 2023/1041 DE LA COMMISSION du 24 mai 2023 octroyant une autorisation de l'Union pour le produit biocide dénommé «TWP 094» conformément au règlement (UE) n° 528/2012 du Parlement européen et du Conseil Numéro officiel : UE/2023/1041 Date de signature : 24/05/2023

05/06/2023

LMR de folpet présents dans ou sur certains produits

RÈGLEMENT (UE) 2023/1042 DE LA COMMISSION du 26 mai 2023 modifiant l'annexe II du règlement (CE) n° 396/2005 du Parlement européen et du Conseil en ce qui concerne les limites maximales applicables aux résidus de folpet présents dans ou sur certains produits Numéro officiel : UE/2023/1042. Date de signature : 26/05/2023 Modification Règlement CE/396/2005 23/02/2005

05/06/2023

LMR d'huile de poisson, de pendiméthaline, de graisse ovine et de spirotétramate

RÈGLEMENT (UE) 2023/1049 DE LA COMMISSION du 30 mai 2023 modifiant les annexes II et IV du règlement (CE) n° 396/2005 du Parlement européen et du Conseil en ce qui concerne les limites maximales applicables aux résidus d'huile de poisson, de pendiméthaline, de graisse ovine et de spirotétramate présents dans ou sur certains produits Numéro officiel : UE/2023/1049 ; date de signature : 30/05/2023 Modification Règlement CE/396/2005 23/02/2005

05/06/2023

LMR de cyantraniliprole présents dans ou sur certains produits

RÈGLEMENT (UE) 2023/1068 DE LA COMMISSION du 1er juin 2023 modifiant l'annexe II du règlement (CE) n° 396/2005 du Parlement européen et du Conseil en ce qui concerne les limites maximales applicables aux résidus de cyantraniliprole présents dans ou sur certains produits Numéro officiel : UE/2023/1068 ; date de signature : 01/06/2023 Modification Règlement CE/396/2005 23/02/2005

05/06/2023

LMR de bixafen, de cyprodinil, de fenhexamide, de fencicoxamide, de fenpyroximate, de flutianil, d'isoxaflutole, de mandipropamide, de méthoxyfénozide et de spinetoram

RÈGLEMENT (UE) 2023/1069 DE LA COMMISSION du 1er juin 2023 modifiant l'annexe II du règlement (CE) n° 396/2005 du Parlement européen et du Conseil en ce qui concerne les limites maximales applicables aux résidus de bixafen, de cyprodinil, de fenhexamide, de fencicoxamide, de fenpyroximate, de flutianil, d'isoxaflutole, de mandipropamide, de méthoxyfénozide et de spinetoram présents dans ou sur certains produits Numéro officiel : UE/2023/1069 ; date de signature : 01/06/2023 Liens juridiques : Mo...

05/06/2023

Autorisation de l'Union pour le produit biocide unique dénommé «Spray On wipes»

RÈGLEMENT D'EXÉCUTION (UE) 2023/1073 DE LA COMMISSION du 1er juin 2023 accordant une autorisation de l'Union pour le produit biocide unique dénommé «Spray On wipes» conformément au règlement (UE) n° 528/2012 du Parlement européen et du Conseil Numéro officiel : UE/2023/1073 Date de signature : 01/06/2023

02/06/2023

Autorisation pour le produit biocide unique dénommé «Spray On»

RÈGLEMENT D'EXÉCUTION (UE) 2023/1161 DE LA COMMISSION du 2 juin 2023 accordant une autorisation de l'Union pour le produit biocide unique dénommé «Spray On» conformément au règlement (UE) n° 528/2012 du Parlement européen et du Conseil

Numéro officiel : UE/2023/1161

Date de signature : 02/06/2023



31/05/2023

Pesticides : la Commission européenne prolonge les autorisations de plusieurs substances problématiques

Par un règlement du 5 mai 2023, la Commission européenne a prolongé les autorisations de mise sur le marché (AMM) d'une quarantaine de substances actives constitutives de produits phytopharmaceutiques. Parmi celles-ci, deux substances particulièrement pointées du doigt : le boscalid et le S-métolachlore.

AVIS / EXPERTISES / NORMES

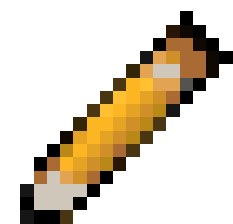


23/06/2023

Peer review of the pesticide risk assessment of the active substance dimethomorph

The conclusions of EFSA following the peer review of the initial risk assessments carried out by the competent authorities of the rapporteur Member State The Netherlands and co-rapporteur Member State Germany for the pesticide active substance dimethomorph and the assessment of applications for maximum residue levels (MRLs) are reported. The context of the peer review was that required by Commission Implementing Regulation (EU) No 844/2012, as amended by Commission Implementing Regulation (EU) No...

www.efsa.europa.eu



21/06/2023

Produits phytopharmaceutiques. Normes élevées d'évaluation des risques également en cas de mélanges, selon le BfR

Les mélanges [co-exposition simultanée à une multitude de substances, y compris des produits chimiques naturels et artificiels] ne deviennent pertinents sur le plan toxicologique que dans les cas où les effets des substances individuelles sont amplifiés à un degré préjudiciable à la santé humaine ou lorsque les substances interagissent les unes avec les autres de telle sorte que des effets dangereux peuvent se produire. Cela peut se produire quelle que soit la nature [substances naturelles ou «sy...

leblogaa.blogspot.com

12/06/2023

Substitution des pesticides « plus dangereux » dans l'U.E : installation d'un groupe d'expert

La cnDaspe est saisie pour émettre un avis sur la mise en œuvre des mesures de substitution des « pesticides plus dangereux » par des produits et méthodes plus sûrs pour la santé et pour l'environnement au sein de l'Union européenne.

www.alerte-sante-environnement-deontologie.fr

06/06/2023

Vers un traité international sur la pollution par les plastiques : enjeux, options, positions de négociations

Le CESE propose dans cet avis, les conditions pour parvenir à un texte international efficace. Ses préconisations, dont les principales sont exposées ci-dessous, recoupent trois grands axes.

www.lecese.fr

DROIT ET POLITIQUE DE L'ENVIRONNEMENT



29/06/2023

EPA Announces New Framework to Prevent Unsafe New PFAS from Entering the Market

Today, the U.S. Environmental Protection Agency (EPA) announced its framework for addressing new and new uses of per- and poly-fluoroalkyl substances (PFAS). The framework outlines EPA's planned approach when reviewing new PFAS and new uses of PFAS to ensure that, before these chemicals are allowed to enter into commerce, EPA will undertake an extensive evaluation to ensure they pose no harm to human health and the environment.

www.epa.gov



28/06/2023

The WHO Europe Ministerial Conference on Environment and Health: addressing the triple crisis of climate change, biodiversity loss and environmental pollution on health

The Seventh Ministerial Conference on Environment and Health, hosted by the World Health Organization (WHO) Regional office for Europe, between 5 - 7 July in Budapest, gathers decision makers to help define future environment and health priorities in the European region. To increase civil society engagement and speed up action on key areas of environmental health, the Health and Environment Alliance (HEAL) will participate in this key conference.

www.env-health.org



28/06/2023

Air pollution in Europe: 2023 reporting status under the National Emission reduction Commitments Directive

This briefing describes the progress made by the EU and its Member States towards reducing emissions of the five main air pollutants regulated under the National Emission reduction Commitments Directive. It presents an assessment of Member State performance against the emission reduction commitments for 2020-2029 as well as their progress towards achieving the more ambitious reduction commitments that will apply from 2030 onward. The briefing also presents the trends for a broader range of air po...

www.eea.europa.eu



27/06/2023

Reducing pollution in EU groundwater and surface waters

Environment Committee MEPs adopted their position on protecting groundwater and surface waters from pollution and improving water quality standards. - A watch list containing substances of emerging concern to better monitor pollution - Threshold values should be ten-times lower for groundwater than for surface water - Producers selling products that contain polluting chemical substances should help finance monitoring

www.europarl.europa.eu



27/06/2023

European Parliament calls for action to curb water pollution

The European Parliament has sent a clear signal on the need to curb water pollution by voting in support of measures that will improve monitoring and [...]

eeb.org



05/06/2023

Breaking the plastic cycle in agriculture

Sustainable solutions and alternatives to halt the proliferation of plastic

www.fao.org

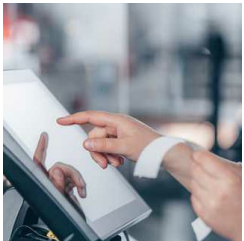


01/06/2023

Prudent use of antibiotics and more research needed to fight antimicrobial resistance

Parliament adopted its recommendations on Thursday for a coordinated EU response to health threats posed by antimicrobial resistance.

www.europarl.europa.eu



31/05/2023

Trois projets de recherche pour mieux comprendre les effets de la pollution sur la santé des femmes

Les effets de l'exposition aux bisphénols et aux nanoparticules de plastique dans le cancer du sein, celle des pesticides dans des pathologies hépatiques ou encore de l'environnement dans l'endométriose sont décryptés dans trois projets de recherche.

www.actu-environnement.com

12/05/2023

Vers un traité mondial pour mettre fin à la pollution plastique : Christophe Béchu et Bérangère Couillard recevront les parties prenantes pour un temps d'échanges - mardi 16 mai à 17h30

La pollution plastique est devenue un fléau mondial aux conséquences néfastes pour la santé humaine et l'environnement. Chaque année, environ 460 millions de tonnes de plastiques sont produites. 353 millions de tonnes deviennent des déchets, soit le poids de près de 35 000 tours Eiffel, faisant ainsi du plastique le troisième matériau le plus fabriqué au monde, derrière le ciment et l'acier.

www.ecologie.gouv.fr

30/06/2023

Novel Study Links Glyphosate Exposure to Heart Damage Through Aging and Reduced Creation of Cardiac Muscle Cells

Exposure to environmentally relevant concentrations of the herbicide glyphosate (GLY) has the potential to induce heart damage (cardiotoxicity) through the aging (senescence) of cells and a reduction of the number of rapidly increasing (proliferating) cells, according to a study published in *Ecotoxicology and Environmental Safety*.

beyondpesticides.org

27/06/2023

Pollution chimique et effet cocktail: une piste vers des tests toxicologiques sans expérimentation animale

Voici une image où apparaissent des mitochondries en rose : ce sont les poumons et « centrales énergétiques » qui permettent aux cellules (en vert, avec leurs noyaux en bleu) de respirer, de vivre et d'assurer leurs fonctions.

Dans les cellules saines à gauche, les mitochondries sont plutôt longues et interconnectées, à l'image d'un réseau routier vu du ciel ; tandis que dans des cellules stressées et endommagées à droite, leur réseau est éclaté en une constellation de mit...

theconversation.com

26/06/2023

Congress Asked to Help Stop Ecosystem Collapse in the Farm Bill by Preserving Local Authority to Restrict Pesticides

In view of EPA's failure to protect pollinators from pesticides, the lives of those essential insects, birds, and mammals are increasingly dependent on state and local laws that under threat of U.S. Congressional action in the upcoming Farm Bill. Tell Congress: Don't allow the Farm Bill to preempt state and local laws. The Farm Bill covers many areas - [...] and one provision that the pesticide industry would like to include is preemption of local authority to restrict pesticide use. [...]

beyondpesticides.org



24/06/2023

Environmental activists protest at Dutch Tata Steel plant

Hundreds of environmental activists wearing red jumpsuits marched with flags and banners on Saturday into the grounds of Tata Steel's plant in the Dutch city of IJmuiden to protest over air and soil pollution in the surrounding area.

www.reuters.com



23/06/2023

3M offers \$10.3B settlement over PFAS contamination in water systems – now, how do you destroy a 'forever chemical'?

PFAS can be filtered, but getting rid of the chemicals is a monumental challenge. A biochemist and soil scientist explain.

theconversation.com

16/06/2023

Endocrine-disrupting chemicals may raise risk of cognitive disorders in future generations, animal study finds

Adverse cognitive effects linked to polychlorinated biphenyls (PCBs) exposure, a type of endocrine-disrupting chemical (EDC), have the potential to be passed down through generations, according to an animal study being presented Thursday at ENDO 2023, the Endocrine Society's annual meeting in Chicago, Ill.

www.eurekalert.org

15/06/2023

Prenatal exposure to phthalates may impact future fertility differently in males and females, animal study finds

Prenatal exposure to chemicals called phthalates, which are used in hundreds of products, may lead to hormonal changes in females that could affect their future fertility, suggests a study in mice being presented Thursday at ENDO 2023, the Endocrine Society's annual meeting in Chicago, Ill.

www.eurekalert.org



15/06/2023

Ces dix pesticides favorisent la maladie de Parkinson

Des chercheurs de l'Université de Harvard et de l'Université de Californie à Los Angeles (UCLA) ont essayé de pallier ce manque de données [lien entre pesticides et problèmes de santé] en étudiant en profondeur le lien entre les molécules utilisées dans des pesticides aux États-Unis et la survenue de la maladie de Parkinson, montrant en suite en laboratoire l'effet délétère de dix d'entre elles sur les neurones dopaminergiques (qui produisent le neurotransmetteur dopamine et qui sont atteints dan...

www.sciencesetavenir.fr



15/06/2023

Pollution aux PFAS : les écologistes lyonnais s'opposent à l'amendement pro industrie

Deux ans de plus d'exposition sous prétexte d'une évaluation de l'impact sanitaire et environnemental, c'est trop ! EELV Rhône-alpes s'oppose à la continuité de l'exposition aux « polluants éternels »

www.lyftvnews.com



06/06/2023

PFAS : des recours pour mieux connaître l'ampleur de la contamination

Deux types de leviers juridiques ont été déposés, l'un par un collectif dont Notre Affaire à tous, l'autre par Générations futures. L'objectif : mieux connaître la contamination aux PFAS, de l'environnement ou humaine. Explications.

www.actu-environnement.com



06/06/2023

Phytoprotecteurs : une commission d'enquête sur l'échec des plans Ecophyto

L'Assemblée nationale a enregistré, le 1er juin, une proposition de résolution sur le lancement d'une commission d'enquête sur « les causes de l'incapacité de la France » à atteindre ses objectifs en matière de produits phytoprotecteurs, fixés dans les plans Ecophyto successifs, à l'heure où le Gouvernement a lancé les travaux de préparation d'un nouveau plan Ecophyto. Portée par le groupe Socialistes et apparentés, cette commission sera présidée par Dominique Potier. Elle conduira ses travaux au ...

www.actu-environnement.com



05/06/2023

Arsenic contamination of food and water is a global public health concern – researchers are studying how it causes cancer

Millions of people worldwide are exposed via soil and water to arsenic, whether naturally occurring or related to pollution. Chronic exposure is linked to the formation of cancer stem cells.

theconversation.com

04/06/2023

World Environment Day: Countries in sub-Saharan African need to work toward a circular economy to reduce plastic waste.

The 2023 World Environment Day will be marked tomorrow, June 5. This day was designated 50 years by the United Nations to raise awareness and action for environmental protection. This year's event is being hosted by Cote d'Ivoire and the theme is solutions to plastic pollution under the campaign #BeatPlasticPollution which the UN launched in 2018.

allianceforscience.org



03/06/2023

Traité plastique : ce qu'il faut retenir des négociations parisiennes

Timide victoire d'étape vendredi 2 juin, au siège de l'Unesco à Paris, pour les participants du Comité international de négociations (INC). Les 175 pays, qui discutent depuis le début de la semaine sur l'adoption du futur traité contre la pollution plastique, ont convenu qu'ils allaient établir une première version du texte d'ici la fin de l'année. "L'INC demande à son président d'élaborer, avec l'aide du secrétariat, un projet de première version du traité international juridiquement contraignant..."

www.lexpress.fr

02/06/2023

Scientists Identify 97 Pesticides and Flame Retardants in Study of Primate Population

Scientists have identified 97 different types of pesticides and flame retardants in primate fecal samples, recently reporting their results in the journal *Biology Letters*. In Uganda's Kibale National Park, researchers studied the chemical exposure of four species of primates (chimpanzees, Ugandan red colobus, olive baboons and red-tailed monkeys), adding to previous research on the subject. The chemicals demonstrate a measurable effect on primate growth and development, sparking considerable unea...

beyondpesticides.org



01/06/2023

Des géants des pesticides accusés d'avoir dissimulé la toxicité de leurs produits pour le cerveau en développement

Selon une étude publiée jeudi, plusieurs fabricants ont soustrait aux autorités européennes des résultats de tests qui mettaient notamment en évidence les effets délétères de leurs substances sur des animaux de laboratoire exposés in utero.

www.lemonde.fr



31/05/2023

PAN Europe requests to end the use of very toxic pesticides in greenhouses

Recently the European Commission has renewed the approval for some very toxic pesticides, restricting utilisation to greenhouses. The EU institutions' falsely treat permanent greenhouses as closed spaces preventing the release of pesticides into the environment. The EFSA guidance document explains that "high-tech greenhouses, usually perceived to be 'closed systems', may still result in [...] leakages into the environment"[1]. Scientific findings confirm that greenhouses are clearly leaking pesti...

www.pan-europe.info



29/05/2023

L'ONU-Environnement demande la mise en place d'un traité international pour mettre fin à la pollution plastique

Le plastique a des conséquences sur la Planète et notre santé, c'est un fait, et selon Inger Andersen, de l'ONU-Environnement, nous en abusons « parce qu'il est trop bon marché ». Actuellement et jusqu'au 2 juin, des délégués de 175 pays se réunissent dans l'objectif de faire aboutir un traité international essentiel pour réduire cette pollution. Les militants, eux, sont invités « à maintenir la pression ».

www.futura-sciences.com



26/05/2023

Highlights from the symposium "What roles can European cities and local authorities play in the prevention and protection against endocrine disrupting chemicals?"

Across Europe, cities and local authorities are taking important steps to limit people's exposure to harmful endocrine disrupting chemicals (EDCs). To put a spotlight on these initiatives and foster inspiration and opportunities for synergies, Réseau Environnement Santé (RES), EDC-Free Europe and the Baltic Environmental Forum (BEF) Germany organised a symposium in the European Parliament in Strasbourg on 20 April 2023, with the support of the city and Eurométropole of Strasbourg.

www.edc-free-europe.org



26/05/2023

[Etude] Persistance inattendue des résidus de pesticides dans les sols en France

Cultures, prairies permanentes et même forêts : une étude pilote menée par l'institut de recherche Inrae et l'université de Bordeaux a révélé la « persistance inattendue » de résidus de pesticides dans la quasi-totalité de 47 sites étudiés à travers la France de 2019 à 2021.

www.terre-net.fr



26/05/2023

Plastique : un traité pour stopper ce fléau

Du 29 mai au 2 juin, à Paris, se réunit le comité de l'ONU chargé de négocier l'adoption d'un traité international contre la pollution plastique. Il y a urgence. La planète étouffe sous nos déchets plastiques. Cette pollution peut être visible à l'œil nu, par exemple sur nos plages ou dans nos rues, mais aussi bien plus insidieuse, nuisant à notre santé, aggravant les inégalités Nord-Sud, détruisant la biodiversité et alimentant la crise climatique... À qui profite le crime ? Pourquoi le traité en ...

www.greenpeace.fr



25/05/2023

Une présence généralisée des pesticides dans les sols agricoles de France, selon une étude-pilote

Une centaine de molécules ont été recherchées sur 47 sites répartis sur le territoire français. Au moins une substance a été retrouvée sur 46 des 47 sites examinés, y compris sur des terrains n'ayant jamais été traités.

www.lemonde.fr

25/05/2023

New Viewpoint of the Historic Link between Endocrine Disrupting Chemicals and Cancer Discussed

A review of scientific literature published in the Journal of Endocrinological Investigation demonstrates exposure to past and current-use endocrine-disrupting chemicals (EDCs), like pesticides, have a long history of severe adverse human health effects. Endocrine disruptors are xenobiotics (i.e., chemical substances like toxic pesticides foreign to an organism or ecosystem) present in nearly all organisms and ecosystems.

beyondpesticides.org



24/05/2023

Toxic chemical cocktails found at over 1,600 river and groundwater sites across England

New analysis of official Environment Agency data has revealed the worrying scale of chemical cocktail pollution in rivers and other freshwater sites across England. The research, which looked at the prevalence of give chemical cocktails known to have toxic impacts for wildlife, also highlights the lack of official monitoring for known harmful chemical cocktails, as well as the lack of a regulatory framework to address these mixtures.

www.pan-uk.org

24/05/2023

Scientists Develop Nontoxic Method To Deter Rodents from Eating Planted Seeds in Crop Production

Scientists have developed a nontoxic method to deter rodents from feeding on freshly planted seeds, publishing the approach in the journal Nature Sustainability this month. The new tactic, which confuses mice through olfactory misinformation, has the potential to significantly reduce the use of hazardous rodenticides in farming operations. The approach comes at a time of increased scrutiny around rat poisons, specifically second-generation anticoagulant rodenticides (SGARs), which can result in t...

beyondpesticides.org



23/05/2023

New Analytical Method Enables Multi-Class Analysis of Pesticides in Corn Products

A new study introduces a comprehensive two-dimensional liquid chromatography coupled with tandem mass spectrometry (2D-LC-MS/MS) method for the analysis of 112 pesticides in corn-based products. The method exhibits high precision, lower limit of quantification values, and successful detection of trace levels of pesticides in real samples, offering promise for the analysis of complex matrices.

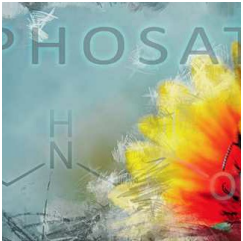
www.chromatographyonline.com

23/05/2023

New Study Spotlights Ten Pesticides Implicated in Development of Parkinson's

New research is zeroing in on the role of 10 commonly used pesticides in the development of Parkinson's. Published in the journal Nature Communications by a team of scientists lead by researchers at the University of California, Los Angeles, the study focused on the toxicity of these pesticides to neurons that have been found to lead to the presentation of the disease. Research is increasingly focusing on environmental exposures, and pesticides in particular, as a major factor in the development ...

beyondpesticides.org



22/05/2023

France court bans two glyphosate-based pesticides

The Administrative Court of Montpellier banned two glyphosate products marketed by Syngenta. The company did not submit the mandatory risk assessment on the impacts on bees, other insects, soil and water life. For this reason, re-authorisation should not have been granted by the authorities. This result is a great win and an important achievement by our member Générations Futures. It will not only protect human health and the environment but also shows the importance to take action and keep the a...

www.pan-europe.info

19/05/2023

Agricultural Pesticide Use the Primary Driver of Bird Declines in Europe

Agricultural intensification is the leading factor driving declines in bird populations across Europe, according to research published in the Proceedings of the National Academy of Sciences (PNAS) this week. Among all potential anthropogenic impacts, agricultural intensification, in particular pesticide and fertilizer use, was found to be more dramatic than forest alterations, urbanization, and climate change.

beyondpesticides.org



17/05/2023

Pesticides : le Sénat donne au gouvernement le pouvoir de suspendre une décision de l'Anses

Cet article controversé, qui n'était pas soutenu par l'exécutif, s'inscrit dans le cadre d'une proposition de loi visant à « créer un choc de compétitivité » dans l'agriculture. Ses détracteurs dénoncent une « régression environnementale ».

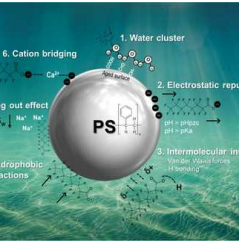
www.lemonde.fr



16/05/2023

Publication de l'Atlas des pesticides en Français

Le bureau de Paris de la Fondation Heinrich Böll et La Fabrique Écologique publient L'Atlas des Pesticides, en coopération avec le collectif Nourrir et Générations Futures.
www.generations-futures.fr



15/05/2023

New model for predicting adsorption of PFAS by microplastics

Rivers, lakes and oceans worldwide are home to trillions of pieces of plastic pollution that are smaller than five millimeters in length, known as microplastics, and their size allows them to easily enter humans and animals. Some can adsorb and transport other harmful toxicants that pollute waterways, including certain types of a more recently discovered set of toxic "forever chemicals" called per- and polyfluoroalkyl substances, or PFAS.

phys.org



15/05/2023

Toxic PFAS can be broken down by bacteria found in wastewater

Certain kinds of "forever chemicals" can be dismantled using bacteria found in wastewater. This points to a possible way of making more of these compounds biodegradable

www.newscientist.com

11/05/2023

Pesticide Exposure Increases the Risk of All Seizures Disorders, Especially Epilepsy

(Beyond Pesticides, May 11, 2023) A study published in NeuroToxicology finds occupational (work-related), chronic exposure to pesticides increases risk factors of epilepsy, a neurological disorder causing unprovoked, reoccurring seizures. Mounting evidence over the past years shows that chronic exposure to sublethal (low) levels of pesticides can cause neurotoxic effects or exacerbate preexisting chemical damage to the nervous system. Although the mechanism by which pesticides induce disease deve...

beyondpesticides.org



10/05/2023

The real-life impact of PFAS pollution on communities – examples from Veneto, Antwerp, Dordrecht, Ronneby and Korsør and how to take action

A new website by the Health and Environment Alliance (HEAL) sheds light on five cases of PFAS pollution affecting communities across Europe and provides resources for concerned citizens and health professionals to take action.

www.env-health.org

10/05/2023

Scientists Zero In on "Rapidly Evolving" Human Pathogenic Fungi, May Be Tied to Widespread Fungicide Use

Scientists are uncovering more information about a fungal pathogen behind a disease outbreak in Indian hospitals that sickened 10 pre-term infants. According to a study published in mBIO late last month, the yeast pathogen *Lodderomyces elongisporus* was the causative agent of this outbreak and is rapidly evolving resistance to control measures. There is growing concern globally over the spread of fungal pathogens, with scientists increasingly identifying agriculture as the driver behind pathogenic...

beyondpesticides.org



09/05/2023

Règlement Pesticides : Nous dénonçons l'annonce du Président du Parti populaire européen (droite)

« Save Bees and Farmers » en appelle à la responsabilité de nos dirigeants à agir en faveur d'un modèle agricole vraiment durable et s'opposer au PPE. Les organisateurs de l'initiative citoyenne européenne (ICE) «Sauvez les abeilles et les agriculteurs » réagissent avec consternation à l'annonce du président du Parti populaire européen (PPE), Manfred Weber, qui demande les retraits de la loi sur la restauration de la nature et du règlement SUR fixant des objectif de réduction des pesticides, e...

www.generations-futures.fr

03/05/2023

Turning the tide on Europe's water pollution crisis

Two decades after the adoption of the EU's Water Framework Directive, less than 40% of Europe's rivers, lakes, coastal and transitional waters are in good chemical status. But why is water pollution still such a problem? Turns out some aren't cleaning up after themselves – and it's high time that they do.

meta.eeb.org