



HAL
open science

Bulletin de veille du réseau d'écotoxicologie terrestre et aquatique N°65

Christian Mougin, Annette Bérard, Sonia Grimbuhler, Soizic Morin, Pascale
Karmasyn-Veyrines

► **To cite this version:**

Christian Mougin, Annette Bérard, Sonia Grimbuhler, Soizic Morin, Pascale Karmasyn-Veyrines. Bulletin de
veille du réseau d'écotoxicologie terrestre et aquatique N°65. 2023, <10.17180/6t27-ay15>. <hal-03885253>

HAL Id: hal-03885253

<https://hal.inrae.fr/hal-03885253v1>

Submitted on 21 Nov 2023

HAL is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.



Distributed under a Creative Commons CC BY-SA 4.0 - Attribution - ShareAlike - International License

Bulletin de veille du réseau d'écotoxicologie terrestre et aquatique



N° 65 Octobre 2023

Réalisé par l'équipe de veille sur la période du 1er Septembre au 31 Octobre 2023.

Christian Mougín (UMR 1402 EcoSys), Annette Berard, Sonia Grimbuhler (UMR 1463 ITAP), Soizic Morin (UR 1454 EABX)

et Pascale Karmasyn-Veyrines (DipSO)

Destinataires : les membres de la liste : ecotox@inrae.fr

Edito

Voici notre 65ème 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://ecotox.hub.inrae.fr/productions/fiches-thematiques>

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

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

SOMMAIRE

ERA / PUBLICATIONS SCIENTIFIQUES / COMMUNAUTES MICROBIENNES AQUATIQUES

- Metal Mixture Toxicity of Ni, Cu, and Zn in Freshwater Algal Communities and the Correlation of Single-Species Sensitivities Among Single Metals: A Comparative Analysis
- Residues of pyrethroids and triazoles pesticides in water and sediment of certain Egyptian watercourses: assessing their influence on fungal diversity
- Influence of the antibiotic nitrofurazone on community dynamics of marine periphytic ciliates: Evidence from community-based bioassays
- Epilithic biofilms as a discriminating matrix for long-term and growing season pesticide contamination in the aquatic environment: Emphasis on glyphosate and metabolite AMPA
- Unlocking secrets of microbial ecotoxicology: recent achievements and future challenges
- The co-presence of polystyrene nanoplastics and ofloxacin demonstrates combined effects on the structure, assembly, and metabolic activities of marine microbial community
- Impacts of fulvic acid and Cr(VI) on metabolism and chromium removal pathways of green microalgae

ERA / PUBLICATIONS SCIENTIFIQUES / PLASTIQUES

- Combined toxic effects of polypropylene and perfluorooctanoic acid on duckweed and periphytic microorganisms
- Microplastics affect soil bacterial community assembly more by their shapes rather than the concentrations
- Ecotoxicity of micro- and nanoplastics on aquatic algae: Facts, challenges, and future opportunities
- Microplastics impact simple aquatic food web dynamics through reduced zooplankton feeding and potentially releasing algae from consumer control
- Quorum sensing bacteria in microplastics epiphytic biofilms and their biological characteristics which potentially impact marine ecosystem
- Impacts of nutrient and marine plastic debris influx on the microalgal community (phytoplankton and periphyton) in Korean temperate coastal waters: Mesocosm study
- The hind information: Exploring the impact of physical damage on mask microbial composition in the aquatic environment
- Research progress on the role of biofilm in heavy metals adsorption-desorption characteristics of microplastics: A review
- Do microbial decomposers find micro- and nanoplastics to be harmful stressors in the aquatic environment? A systematic review of in vitro toxicological research
- Effects of microplastics on the growth, photosynthetic efficiency and nutrient composition in freshwater algae *Chlorella vulgaris* Beij
- Plastic substrate and residual time of microplastics in the urban river shape the composition and structure of bacterial communities in plastisphere

PESTICIDES ET SANTE DES AGRICULTEURS

- Research on knowledge construction and analysis of pesticide exposure to children based on bibliometrics
- Joint associations between established genetic susceptibility loci, pesticide exposures, and risk of prostate cancer
- A latent functional approach for modeling the effects of multidimensional exposures on disease risk - Kim - 2023 - Statistics in Medicine - Wiley Online Library
- Does prenatal exposure to multiple airborne and tap-water pollutants increase neonatal thyroid-stimulating hormone concentrations? Data from the Picardy region, France
- Prenatal dietary exposure to chemicals and allergy or respiratory diseases in children in the EDEN mother-child cohort
- Agricultural activities and risk of treatment for depressive disorders among the entire French agricultural workforce: the TRACTOR project, a nationwide retrospective cohort study
- Environmental, bystander and resident exposure from orchard applications using an agricultural unmanned aerial spraying system

PUBLICATIONS DU RESEAU ECOTOX

- Are hospital wastewater treatment plants a source of new resistant bacterial strains?
- Environmental pollution and nutritional quality modulate immune response of the wood mouse (*Apodemus sylvaticus*) through hormonal disturbances
- A Strategy to Valorize a By-Product of Pine Wood (*Pinus pinaster*) for Copper Removal from Aqueous Solutions
- Toxicity assessment of environmental MPs and NPs and polystyrene NPs on the bivalve *Corbicula fluminea* using a multi-marker approach
- Efficient biodegradation of the recalcitrant organochlorine pesticide chlordane under methanogenic conditions
- Effects of conventional vs. organic farming practices on raptor nestling health: Neither black nor white
- Consideration of unmeasured micropollutants released from WWTP for potential impact estimations
- Silencing of Cytochrome P450 genes CYP6CY14 and CYP6DC1 in *Aphis gossypii* by RNA interference enhances susceptibility to clothianidin
- Sublethal and transgenerational effects of lufenuron on biological characteristics and expression of reproductive related genes in the fall armyworm, *Spodoptera frugiperda*
- Altered ovarian transcriptome is linked to early mortality and abnormalities in zebrafish embryos after maternal exposure to gamma irradiation
- Current knowledge on the origin of insecticide resistance mechanisms: the tip of the iceberg?
- Unlocking secrets of microbial ecotoxicology: recent achievements and future challenges
- Acclimation and transgenerational plasticity support increased cadmium tolerance in *Gammarus* populations exposed to natural metal contamination in headwater streams
- Physiological effects of PFAS exposure in seabird chicks: A multi-species study of thyroid hormone triiodothyronine, body condition and telomere length in South Western France
- hb or not hb - When and why accounting for background mortality in toxicological survival models matters?
- Deltamethrin and transfluthrin select for distinct transcriptomic responses in the malaria vector *Anopheles gambiae*
- NORMAN guidance on suspect and non-target screening in environmental monitoring
- Investigating the role of the ROS/CncC signaling pathway in the response to xenobiotics in *Spodoptera frugiperda* using Sf9 cells

- Assessment of the Presence of Transformation Products of Certain Pharmaceutical Products (Psychotropic Family) by Suspect and Non-Targeted HRMS Screening in Wastewater Treatment Plants
- Polychlorinated Biphenyl Transformation, Peroxidase and Oxidase Activities of Fungi and Bacteria Isolated from a Historically Contaminated Site
- Mercury deposition in the Eastern Mediterranean: Modern fluxes in the water column and Holocene accumulation rates in abyssal sediment
- Evaluating pesticide degradation in artificial wetlands with compound-specific isotope analysis: A case study with the fungicide dimethomorph
- National soil data in EU countries, where do we stand?
- Assessment of cyanotoxins in water and fish in an African freshwater lagoon (Lagoon Aghien, Ivory Coast) and the application of WHO guidelines
- Floristic survey, trace element transfers between soil and vegetation and human health risk at an urban industrial wasteland
- PBTK-TD model of the phagocytosis activity in three-spined stickleback exposed to BPA
- Fate and impact of nanoplastics in the human digestive environment after oral exposure: A common challenge for toxicology and chemistry
- Sublethal effects of nine insecticides on *Drosophila suzukii* and its major pupal parasitoid *Trichopria drosophilae*
- Global assessment of marine plastic exposure risk for oceanic birds
- Linking ecotoxicological effects on biodiversity and ecosystem functions to impairment of ecosystem services is a challenge: an illustration with the case of plant protection products
- Bioaccumulation and molecular effects of carbamazepine and methylmercury co-exposure in males of *Dreissena polymorpha*

OUVRAGES / RAPPORTS / ACTES DE CONGRES

- OECD Promotes Monitoring and Regulating Endocrine Disruptors in Water
- Emerging Materials and Environment
- Persistent Chemicals: Detecting, Limiting Exposure To, and Treating PFAS Contamination

REGLEMENTATION

- LMR de carbétamide, de carboxine et de triflumuron présents dans ou sur certains produits
- Plants de pomme de terre : entrée (provenance Royaume-Uni) et utilisation en Irlande du Nord de tubercules de *Solanum tuberosum* L. destinés à la plantation des plants et modèle d'étiquette phytosanitaire pour les plants de pommes de terre
- Etiquette phytosanitaire (Contenu et modèle) pour les végétaux destinés à la plantation autres que les plants de pommes de terre, ainsi que pour les machines et les véhicules qui ont été exploités à des fins agricoles ou forestières et entrant en Irlande du Nord à partir d'autres parties du Royaume-Uni
- Enregistrement, évaluation et autorisation des substances chimiques, ainsi que les restrictions applicables à ces substances (REACH), en ce qui concerne les microparticules de polymère synthétique
- LMR de benzoate de dénatonium, de diurone, d'étoxazole, de méthomyl et de téflubenzuron présents dans ou sur certains produits
- Statistiques sur l'utilisation des produits phytopharmaceutiques qui doivent être transmises pour l'année de référence 2026 pendant le régime transitoire 2025-2027 et les statistiques sur les produits phytopharmaceutiques mis sur le marché
- Autorisation de l'Union pour la famille de produits biocides dénommée «Oxy'Pharm H2O2»

- Autorisation de l'Union pour la famille de produits biocides dénommée «SALVECO SALVESAFE PRODUCTS»
- Prolongation de la période d'approbation des substances actives bensulfuron, chlorméquat, chlorotoluron, clomazone, daminozide, deltaméthrine, eugénol, fludioxonyl, flufénacet, flumétraline, fosthiazate, géranol, MCPA, MCPB, propaquizafop, prosulfocarbe, quizalofop-P-éthyle, quizalofop-P-téfuryle, 5-nitroguaiacolate de sodium, o-nitrophénolate de sodium, p-nitrophénolate de sodium, fluorure de sulfuryle, tébufenpyrad, thymol et tritosulfuron
- LMR résidus d'isoxabène, de métaldéhyde, de metarhizium brunneum — souche Ma 43, de paclobutrazol et de phéromones de lépidoptères à chaîne linéaire (SCLP) présents dans ou sur certains produits

DROIT ET POLITIQUE DE L'ENVIRONNEMENT

- Consultation publique : projet de décret à la délivrance du conseil stratégique prévu à l'article R. 254-26-2 du code rural et de la pêche maritime
- Deux appels à projets de recherche pour mieux connaître les risques sanitaires liés à l'environnement et au travail | Anses - Agence nationale de sécurité sanitaire de l'alimentation, de l'environnement et du travail
- Le débat sur le glyphosate à nouveau sur la table en Europe
- Reducing pollution in EU groundwater and surface waters

REVUE DE PRESSE

- Pesticides : le constat d'un échec gouvernemental
- [Herbicides] Arrêt du glyphosate en Bretagne ? La chambre d'agriculture dit non à la Région
- Étude internationale sur la cancérogénicité du Glyphosate : découvertes inquiétantes sur la leucémie chez les rats.
- Règlement pesticides SUR : un bilan mitigé mais porteur d'espoir du vote en commission environnement
- Glyphosate », médias et politique : la science inaudible et déformée
- PFAS : pour une interdiction universelle !
- Interdictions votées pour le S-métolachlore et 5 pesticides suspectés d'être des perturbateurs endocriniens !
- Phytos et leucémies infantiles : les risques liés aux vignes proches précisés
- Une étude de l'Inserm s'intéresse au lien entre le risque de leucémie pédiatrique et le fait d'habiter à proximité de vignes
- L'Anses sévit contre un herbicide pour protéger les enfants
- Glyphosate : des ONG accusent Bayer d'avoir omis des données défavorables
- Water pollution: Updating EU regulations. What happened, what it means and what remains to be done
- [Herbicide] Prosulfocarbe : l'Anses impose une zone-tampon d'au moins 10 mètres
- Swimming in glyphosate: Analysis of official glyphosate and AMPA data in Spanish waters in 2021 and 2022
- Glyphosate scandal: EU agencies ECHA and EFSA ignore toxic effects of glyphosate highlighted by French national medical research institute
- [Glyphosate] Berlin plaide pour une interdiction dans l'UE
- A Very Slow EPA Settlement Process Keeps a Harmful Herbicide on the Market
- UK falling behind EU pesticide standards
- Scandale sur l'évaluation du glyphosate : Les agences sanitaires ignorent de très nombreux effets toxiques du glyphosate mis en évidence par la recherche médicale française (Inserm)
- ALERTE : Les citoyens européens soutiennent une interdiction européenne du glyphosate
- [« Justice pour le vivant »] Les ONG font appel pour contraindre l'Etat sur les produits phytos
- Romania gives green light for mass extinction of bees
- Glyphosate et pollution de l'eau : publication d'un nouveau rapport

- Ecotone et Solagro calculent « l'empreinte pesticides » de l'alimentation

Metal Mixture Toxicity of Ni, Cu, and Zn in Freshwater Algal Communities and the Correlation of Single-Species Sensitivities Among Single Metals: A Comparative Analysis

Authors: Fettweis A, Hansul S, De Schamphelaere K, Smolders E

Source: ENVIRONMENTAL TOXICOLOGY AND CHEMISTRY Early Access, DOI 10.1002/etc.5735

Abstract: The effects assessment of metals is mainly based on data of single metals on single species, thereby not accounting for effects of metal mixtures or effects of species interactions. Both of these effects were tested in combination, thereby hypothesizing that the sensitivity of a c...

Residues of pyrethroids and triazoles pesticides in water and sediment of certain Egyptian watercourses: assessing their influence on fungal diversity

Authors: Abdel-Wareth MTA, Abd El-Hamid RM

Source: JOURNAL OF ENVIRONMENTAL SCIENCE AND HEALTH PART B-PESTICIDES FOOD CONTAMINANTS AND AGRICULTURAL WASTES Early Access, DOI 10.1080/03601234.2023.2263191

Abstract: Contamination of water and sediment with pyrethroids and triazoles residues can affect fungal diversity, and hence the aquatic system functioning. The aim of the present study is to investigate the effect of water and sedi...

Influence of the antibiotic nitrofurazone on community dynamics of marine periphytic ciliates: Evidence from community-based bioassays

Authors: Kazmi SSU, Saqib HSA, Pastorino P et al.

Source: SCIENCE OF THE TOTAL ENVIRONMENT 904:166687, 2023, DOI 10.1016/j.scitotenv.2023.166687

Abstract: Marine periphytic ciliates play a pivotal role in shaping coastal ecosystems dynamics, thereby acting as robust biological indicators of aquatic ecosystem health and functionality. However, the understanding of the effects of veterinary antibiotics on composition and structure of...

Epilithic biofilms as a discriminating matrix for long-term and growing season pesticide contamination in the aquatic environment: Emphasis on glyphosate and metabolite AMPA

Authors: Fernandes G, Aparicio VC, De Gerónimo E et al.

Source: SCIENCE OF THE TOTAL ENVIRONMENT 900: 166315, 2023, DOI 10.1016/j.scitotenv.2023.166315

Abstract: The indiscriminate use of pesticides represents high ecological risk in aquatic systems. Recently, the inclusion of epilithic biofilms as a reactive matrix has shown potential in diagnosing the health of water resources. The objective of this study was to use multiple matr...

Unlocking secrets of microbial ecotoxicology: recent achievements and future challenges

Authors: Hellal J, Barthelmebs L, Berard A et al.

Source: FEMS MICROBIOLOGY ECOLOGY 99: fiad102, 2023, DOI 10.1093/femsec/fiad102

Abstract: Environmental pollution is one of the main challenges faced by humanity. By their ubiquity and vast range of metabolic capabilities, microorganisms are affected by pollution with consequences on their host organisms and on the functioning of their environment. They also play key roles in the fa...

The co-presence of polystyrene nanoplastics and ofloxacin demonstrates combined effects on the structure, assembly, and metabolic activities of marine microbial community

Authors: Liu MJ, Yu XW, Yang MY et al.

Source: JOURNAL OF HAZARDOUS MATERIALS 459: 132315, 2023, DOI 10.1016/j.jhazmat.2023.132315

Abstract: Nanoplastic is increasing in environments and can address toxic effects on various organisms. Particle size, concentration, and surface functionalization most influence nanoplastic toxicity. Besides, nanoplastic can adsorb other contaminants (e.g., antibiotics) to aggravate its adverse effects...

Impacts of fulvic acid and Cr(VI) on metabolism and chromium removal pathways of green microalgae

Authors: Luo L, Yang C, Jiang X et al.

Source: JOURNAL OF HAZARDOUS MATERIALS 459: 132171, 2023, DOI 10.1016/j.jhazmat.2023.132171

Abstract: Green microalgae are highly efficient and cost-effective in the removal of heavy metals from water. However, dissolved organic matter, such as fulvic acid (FA), can impact their growth and heavy metal accumulation. Nonetheless, the specific mechanisms underlying these effects remain poorly und...

ERA / PUBLICATIONS SCIENTIFIQUES / PLASTIQUES

Combined toxic effects of polypropylene and perfluorooctanoic acid on duckweed and periphytic microorganisms

Authors: Li Q, Jiang JR, Lan YY et al.

Source: ENVIRONMENTAL SCIENCE AND POLLUTION RESEARCH Early Access, DOI 10.1007/s11356-023-30006-9

Abstract: Microplastics and perfluorooctanoic acid coexist in the aquatic environment. Duckweed was exposed to a range of concentrations (0.1-1000 µg/L) of solutions containing polypropylene and perfluorooctanoic acid for 14 days to measure their toxicity...

Microplastics affect soil bacterial community assembly more by their shapes rather than the concentrations

Authors: Wang PY, Zhao ZY, Xiong XB et al.

Source: WATER RESEARCH 245:120581, 2023, DOI 10.1016/j.watres.2023.120581

Abstract: Polyethylene film mulching is a key technology for soil water retention in dryland agriculture, but the aging of the films can generate a large number of microplastics with different shapes. There exists a widespread misunderstanding that the concentrations of microplastics might be the determinant affectin...

Ecotoxicity of micro- and nanoplastics on aquatic algae: Facts, challenges, and future opportunities

Authors: Nguyen MK, Lin C, Nguyen HL et al.

Source: JOURNAL OF ENVIRONMENTAL MANAGEMENT 346:118982, 2023, DOI 10.1016/j.jenvman.2023.118982

Abstract: The production of plastic has exponentially increased in recent years, leading to the release of millions of tons of plastic waste into the environment annually. This waste can break down into smaller micro- and nanoplastics (MNPs) that are toxic and reactive to life forms, including ...

Microplastics impact simple aquatic food web dynamics through reduced zooplankton feeding and potentially releasing algae from consumer control

Authors: Malinowski CR, Searle CL, Schaber J, Höök TO

Source: SCIENCE OF THE TOTAL ENVIRONMENT 904:166691, 2023, DOI 10.1016/j.scitotenv.2023.166691

Abstract: Concentrations of microplastics in aquatic environments continue to rise due to industrial production and pollution. While there are various concerns regarding potential deleterious effects of microplastics on ecosystems, several knowledge gaps remain, including the potential...

Quorum sensing bacteria in microplastics epiphytic biofilms and their biological characteristics which potentially impact marine ecosystem

Authors: Xu XY, Wang S, Li CX et al.

Source: ECOTOXICOLOGY AND ENVIRONMENTAL SAFETY 264:115444, 2023, DOI 10.1016/j.ecoenv.2023.115444

Abstract: Microplastics (MPs) have been shown to be a new type of pollutant in the oceans, with complex biofilms attached to their surfaces. Bacteria with quorum sensing (QS) systems are important participants in biofilms. Such bacteria can secrete and detect signal molecules. When a signal molecule...

Impacts of nutrient and marine plastic debris influx on the microalgal community (phytoplankton and periphyton) in Korean temperate coastal waters: Mesocosm study

Authors: Lee CH, Lim YK, Yoon JN, Baek SH

Source: JOURNAL OF APPLIED PHYCOLOGY Early Access, 2023, DOI 10.1007/s10811-023-03069-x

Abstract: Anthropogenic pollutants, such as excessive nutrients and marine plastic debris (MPDs), can significantly affect marine micro-ecosystems, including phytoplankton and periphyton. However, there have been few studies about the impacts of these pollutants on microalgal community. We aimed to assess...

The hind information: Exploring the impact of physical damage on mask microbial composition in the aquatic environment

Authors: Wang H, Zhu ZX, Zhang L et al.

Source: ENVIRONMENTAL RESEARCH 237: 116917, 2023, DOI 10.1016/j.envres.2023.116917

Abstract: Due to poor management and the lack of environmental awareness, lots of masks (an emerging form of plastic pollution) are discarded into the environment during the COVID-19, thereby jeopardizing the health of humans and the environment. Our study introduces a novel perspective by examining the impact ...

Research progress on the role of biofilm in heavy metals adsorption-desorption characteristics of microplastics: A review

Authors: Pan HX, Zhao X, Zhou XY et al.

Source: ENVIRONMENTAL POLLUTION 336: 122448, 2023, DOI 10.1016/j.envpol.2023.122448

Abstract: Microplastics (MPs) have been found to be widely distributed in aquatic environments, where they will interact with toxic heavy metals and result in more serious adverse effects on the aquatic environments and organisms. However, after entering the aquatic environments, MPs are quickly covered by bio...

Do microbial decomposers find micro- and nanoplastics to be harmful stressors in the aquatic environment? A systematic review of in vitro toxicological research

Authors: Shruti VC, Kutralam-Muniasamy G, Perez-Guevara F

Source: SCIENCE OF THE TOTAL ENVIRONMENT 903: 166561, 2023, DOI 10.1016/j.scitotenv.2023.166561

Abstract: Microbial decomposers (bacteria and fungi) are likely to interact with plastic particles introduced into natural systems, particularly micro-and nanoplastics (MNPs), exposing them to a variety of risks. [...] Here, we conducted a systematic review of the available research...

Effects of microplastics on the growth, photosynthetic efficiency and nutrient composition in freshwater algae *Chlorella vulgaris* Beij

Authors: Wang XF, Zhao YM, Zhao LF et al.

Source: AQUATIC TOXICOLOGY 261: 106615, 2023, DOI 10.1016/j.aquatox.2023.106615

Abstract: Microplastics, plastic particles and fragments smaller than 5 mm are ubiquitous in various aquatic environments, but the hazards of microplastics with different particle sizes, concentrations and materials are not well understood. This study investigated the toxicity of polyethylene microplastics with ...

Plastic substrate and residual time of microplastics in the urban river shape the composition and structure of bacterial communities in plastisphere

Authors: Xu LB, Li K, Zhang MJ et al.

Source: JOURNAL OF ENVIRONMENTAL MANAGEMENT 345: 118710, 2023, DOI 10.1016/j.jenvman.2023.118710

Abstract: The widespread secondary microplastics (MPs) in urban freshwater, originating from plastic wastes, have created a new habitat called plastisphere for microorganisms. The factors influencing the structure and ecological risks of the microbial community within the plastisphere are not yet fu...

PESTICIDES ET SANTE DES AGRICULTEURS

Research on knowledge construction and analysis of pesticide exposure to children based on bibliometrics

Authors: Guo CY, Liu YB, Liu YC, Zhang XY et al.

Source: ENVIRONMENTAL SCIENCE AND POLLUTION RESEARCH 2023, DOI 10.1007/s11356-023-29457

Abstract: Pesticide exposure is a major health problem that cannot be ignored, and children are particularly vulnerable and sensitive. As a result, the study of health damage in children caused by pesticide exposure has gradually developed into an important cross-disciplinary research topic. In th...

Joint associations between established genetic susceptibility loci, pesticide exposures, and risk of prostate cancer

Authors: Hurwitz LM., Beane Freeman LB., Andreotti G., Hofmann JN. et al.

Source: ENVIRONMENTAL RESEARCH 237(2): 117063, 2021, DOI 10.1016/j.envres.2023.117063

Abstract: More than 200 genetic variants have been independently associated with prostate cancer risk. Studies among farmers have also observed increased prostate cancer risk associated with exposure to specific organophosphate (fonofos, terbufos, malathion, dimethoate) and...

A latent functional approach for modeling the effects of multidimensional exposures on disease risk - Kim - 2023 - Statistics in Medicine - Wiley Online Library

Authors: Kim S, Freeman LEB, Albert PS

Source: STATISTICS IN MEDICINE 2023, DOI 110.1002/sim.9888

Abstract: Understanding the relationships between exposure and disease incidence is an important problem in environmental epidemiology. Typically, a large number of these exposures are measured, and it is found either that a few exposures transmit risk or that each exposure transmits a small amount of risk, but, taken together, these m...

Does prenatal exposure to multiple airborne and tap-water pollutants increase neonatal thyroid-stimulating hormone concentrations? Data from the Picardy region, France

Authors: Chamot S., Al-Salameh A., Petit P., Bonneterre V. et al.

Source: SCIENCE OF THE TOTAL ENVIRONMENT, 905:167089, 2023, DOI 10.1016/j.scitotenv.2023.167089

Abstract: Systematic screening for congenital hypothyroidism by heel-stick sampling has revealed unexpected heterogeneity in the geographic distribution of newborn thyroid-stimulating hormone concentrations in Picardy, France. We explored a possible relationship with envir...

Prenatal dietary exposure to chemicals and allergy or respiratory diseases in children in the EDEN mother-child cohort

Authors: Ghozala M., Kadawathagedaraa M., Delvertb R., Adel-Patientc K. et al.

Source: ENVIRONMENT INTERNATIONAL 180: 108195, 2023, DOI 10.1016/j.envint.2023.108195

Abstract: Maternal exposure to food chemicals may increase the risk of allergy and respiratory disorders in offspring. We aimed to assess the association of prenatal dietary exposure to single chemicals and chemical mixtures with allergy or respiratory events reported b...

Agricultural activities and risk of treatment for depressive disorders among the entire French agricultural workforce: the TRACTOR project, a nationwide retrospective cohort study

Authors: Petit P, Gandon G, Dubuc M, Vuillerme N et al.

Source: LANCET REGIONAL HEALTH-EUROPE 31:100674, 2023, DOI 10.1016/j.lanep.2023.100674

Abstract: Although depression is a major issue among farming population, to date, there have been few studies on specific agricultural activities. We aimed to investigate whether, among the entire French farm manager (FM) workforce, certain agricultural activities are more strongly associat...

Environmental, bystander and resident exposure from orchard applications using an agricultural unmanned aerial spraying system

Authors: Dubuis PH, Droz M, Melgar A, Zürcher UA et al.

Source: SCIENCE OF THE TOTAL ENVIRONMENT 881:163371, 2023, DOI 10.1016/j.scitotenv.2023.163371

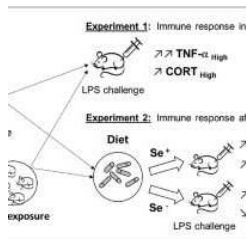
Abstract: Unmanned aerial spraying systems (UASS), i.e., unmanned aerial vehicles designed for pesticide applications, are widely used in East Asia and increasingly prevalent in other regions of the world, including North America and Europe. However, according to a recent report of t...



Are hospital wastewater treatment plants a source of new resistant bacterial strains?

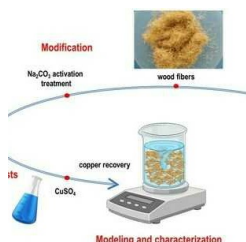
Authors: Canan-Rochenbach G, Barreiros MAB, Lima AOS, Conti-Lampert AD et al.
Source: Environmental Science and Pollution Research Early Access, 2023, DOI 10.1007/s11356-023-30007-8

Abstract: To understand which type of hospital waste may contain the highest amount of antibiotic resistant microorganisms that could be released into the environment, the bacterial strains entering and leaving a hospital wastewater treatment plant (HWT...



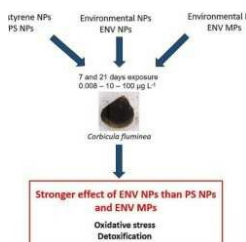
Environmental pollution and nutritional quality modulate immune response of the wood mouse (*Apodemus sylvaticus*) through hormonal disturbances

Authors: Devalloir Q, Fritsch C, Alchammas Y, Raoul F et al.
Source: Environmental Pollution 337: 122100, 2023, DOI 10.1016/j.envpol.2023.122100
Abstract: Cadmium (Cd) and lead (Pb) are known to enhance immune cell damages and to decrease cellular immunity, promoting higher susceptibility to infectious diseases. Selenium (Se) is an essential element involved in immunity and reactive oxygen species scavenging. This study aimed at ev...



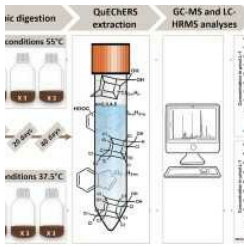
A Strategy to Valorize a By-Product of Pine Wood (*Pinus pinaster*) for Copper Removal from Aqueous Solutions

Authors: Mongioví C, Jailliet M, Lacalamita D, Morin-Crini N et al.
Source: Molecules 28(18): 6436, 2023, DOI 10.3390/molecules28186436
Abstract: This study describes the valorization of a pine wood by-product (*Pinus pinaster*) in the form of individualized fibers to a complex copper or more broadly metals present in an aqueous solution using a batch process. The adsorption results show that pine fibres activated by sodium carbonate ...



Toxicity assessment of environmental MPs and NPs and polystyrene NPs on the bivalve *Corbicula fluminea* using a multi-marker approach

Authors: Latchere O, Roman C, Métais I, Perrein-Ettajani H et al.
Source: Comparative Biochemistry and Physiology Part C: Toxicology & Pharmacology 273: 109714, 2023, DOI 10.1016/j.cbpc.2023.109714
Abstract: Small plastic particles, microplastics (MPs) and nanoplastics (NPs) represent a major threat in aquatic environments. Freshwater organisms are exposed to MPs and NPs, particularly in industrial and urban areas. The present ...



Efficient biodegradation of the recalcitrant organochlorine pesticide chlordecone under methanogenic conditions

Authors: Martin DE, Alnajjar P, Muselet D, Soligot-Hognon C et al.

Source: Science of the Total Environment 903: 166345, 2023, DOI 10.1016/j.scitotenv.2023.166345

Abstract: Anaerobic digestion (AD) has long been studied as an effective environmental and economic strategy for treating matrices contaminated with recalcitrant pollutants. In the present work, we investigated the bioremediation potential of AD on organic waste containing...

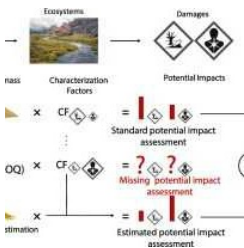


Effects of conventional vs. organic farming practices on raptor nestling health: Neither black nor white

Authors: Fuentes E, Moreau J, Teixeira M, Bretagnolle V et al.

Source: Agriculture Ecosystems & Environment 358: 108719, 2023, DOI 10.1016/j.agee.2023.108719

Abstract: Agricultural intensification is one of the main threats to biodiversity. Farmland bird specialists such as Montagu's harrier, *Circus pygargus*, are particularly at risk and declining. Conventional farming (CF) production systems usually involve landscape homogenisation...



Consideration of unmeasured micropollutants released from WWTP for potential impact estimations

Authors: Servien R, Bonnot K, Latrille E, Hélias A et al.

Source: Science of the Total Environment 904: 166313, 2023, DOI 10.1016/j.scitotenv.2023.166313

Abstract: During wastewater treatment, micropollutants are only partly eliminated and may present a risk for human health and aquatic ecosystems. The potential impacts these substances may have are currently underestimated due to the lack in available concentrations that lie below...

Silencing of Cytochrome P450 genes CYP6CY14 and CYP6DC1 in *Aphis gossypii* by RNA interference enhances susceptibility to clothianidin

Authors: Ullah F, Gul H, Tariq K, Hafeez M et al.

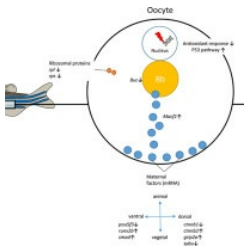
Source: Entomologia Generalis 43(3): 669-678, 2023, DOI 10.1127/entomologia/2023/2002

Abstract: Cytochrome P450s (CYPs) genes are associated with insecticide resistance through overexpression and detoxification mechanisms in several insect-pest species. However, little is known about the role of P450s genes and their response to clothianidin resistance development in cotton-melon aphid...

Sublethal effects - F ₁				Pupa weight			
Development time	Longevity	V	D	V	D	V	D
LC ₅₀	Δ: neutral	Δ: positive	Δ: neutral	Δ: neutral	Δ: neutral	Δ: neutral	Δ: neutral
LC ₉₀	Δ: neutral	Δ: positive	Δ: neutral	Δ: neutral	Δ: neutral	Δ: neutral	Δ: neutral
Expression levels of reproductive related genes (F ₂ treated with LC ₅₀ of F ₁)							
Transgenerational effects - F ₂				Pupa weight			
Development time	Longevity	V	D	V	D	V	D
LC ₅₀	Δ: neutral	Δ: neutral	Δ: neutral	Δ: neutral	Δ: neutral	Δ: neutral	Δ: neutral
LC ₉₀	Δ: neutral	Δ: positive	Δ: neutral	Δ: neutral	Δ: neutral	Δ: neutral	Δ: neutral
LC ₉₅	Δ: positive	Δ: neutral	Δ: neutral	Δ: neutral	Δ: neutral	Δ: neutral	Δ: neutral

Sublethal and transgenerational effects of lufenuron on biological characteristics and expression of reproductive related genes in the fall armyworm, *Spodoptera frugiperda*

The fall armyworm, *Spodoptera frugiperda*, is a notorious polyphagous pest that causes serious economic losses in crucial crops and has invaded Africa ...



Altered ovarian transcriptome is linked to early mortality and abnormalities in zebrafish embryos after maternal exposure to gamma irradiation

Recent laboratory studies focusing on multigenerational approach demonstrated drastic phenotypic effects after chronic fish irradiation exposure. No i...

Current knowledge on the origin of insecticide resistance mechanisms: the tip of the iceberg?

Authors: Amichot M, Brun-Barale A, Haddi K, Nauen R et al.

Source: Entomologia Generalis 43(3): 501-503, 2023, DOI 10.1127/entomologia/2023/2153

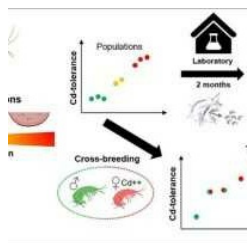
Opinion: Insecticide resistance is characterized by a wide variety of mechanisms including modification of the target-site, over- expression of metabolizing enzymes, structural modification of these same enzymes, and increased excretion or reduced penetration of the insecticide. Furthermor...

Unlocking secrets of microbial ecotoxicology: recent achievements and future challenges

Authors: Hellal J, Barthelmebs L, Berard A et al.

Source: FEMS MICROBIOLOGY ECOLOGY 99: fiad102, 2023, DOI 10.1093/femsec/fiad102

Abstract: Environmental pollution is one of the main challenges faced by humanity. By their ubiquity and vast range of metabolic capabilities, microorganisms are affected by pollution with consequences on their host organisms and on the functioning of their environment. They also play key roles in the fa...



Acclimation and transgenerational plasticity support increased cadmium tolerance in Gammarus populations exposed to natural metal contamination in headwater streams

Authors: Lalouette A, Degli Esposti D, Garnero L, Allibert M et al.

Source: Science of the Total Environment 903: 166216, 2023, DOI 10.1016/j.scitotenv.2023.166216

Abstract: Considering long-term population effects of chronic exposure to contaminants remains limited in ecological risk assessment. Field evidence that multigenerational exposure influences organisms' sensitivity is still scarce, and mechanisms have yet to be elucidat...

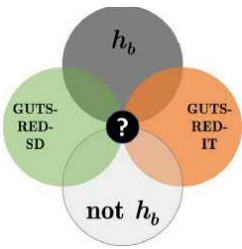


Physiological effects of PFAS exposure in seabird chicks: A multi-species study of thyroid hormone triiodothyronine, body condition and telomere length in South Western France

Authors: Sebastiano M, Jouanneau W, Blevin P, Angelier F et al.

Source: Science of the Total Environment 901: 165920, 2023, DOI 10.1016/j.scitotenv.2023.165920

Abstract: There is growing evidence that poly and perfluoroalkyl substances (PFAS) exposure leads to the disruption of thyroid hormones including thyroxine (T4) and triiodothyronine (T3), and may affect telomeres, repetitive nucleotide sequences which protect chromosome ends...

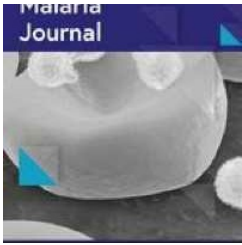


hb or not hb - When and why accounting for background mortality in toxicological survival models matters?

Authors: Plantade J, Baudrot V, Charles S

Source: MethodsX 10: 102114, 2023, DOI 10.1016/j.mex.2023.102114

Abstract: Decisions in Environmental Risk Assessment (ERA) about impacts of chemical compounds on different species are based on critical effect indicators such as the 50% lethal concentration (LC50). Regulatory documents recommend concentration-response (or concentration-effect) model fitting on standard toxicity test data t...



Deltamethrin and transfluthrin select for distinct transcriptomic responses in the malaria vector Anopheles gambiae

Authors: Zoh MG, Bonneville JM, Laporte F, Tutagata J et al.

Source: Malaria Journal 22(1): 256, 2023, DOI 10.1186/s12936-023-04673-5

Abstract: Background The widespread use of pyrethroid insecticides in Africa has led to the development of strong resistance in Anopheles mosquitoes. Introducing new active ingredients can contribute to overcome this phenomenon and ensure the effectiveness of vector control strategies. Transfluthrin...

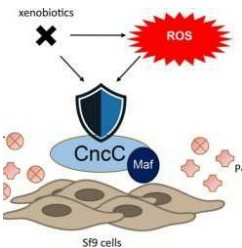


NORMAN guidance on suspect and non-target screening in environmental monitoring

Authors: Hollender J, Schymanski EL, Ahrens L, Alygizakis N et al.

Source: Environmental Sciences Europe 35(1): 75, 2023, DOI 10.1186/s12302-023-00779-4

Abstract: Increasing production and use of chemicals and awareness of their impact on ecosystems and humans has led to large interest for broadening the knowledge on the chemical status of the environment and human health by suspect and non-target screening (NTS). To facilitate eff...

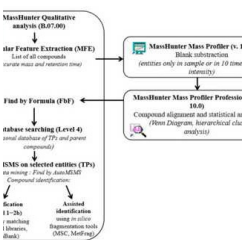


Investigating the role of the ROS/CncC signaling pathway in the response to xenobiotics in Spodoptera frugiperda using Sf9 cells

Authors: Amezian D, Fricaux T, de Sousa G, Maiwald F et al.

Source: Pesticide Biochemistry and Physiology 195: 105563, 2023, DOI 10.1016/j.pestbp.2023.105563

Abstract: *Spodoptera frugiperda* (fall armyworm, FAW) is an invasive polyphagous lepidopteran pest that has developed sophisticated resistance mechanisms involving detoxification enzymes to eliminate toxic compounds it encounters in its diet including insecticides. Altho...

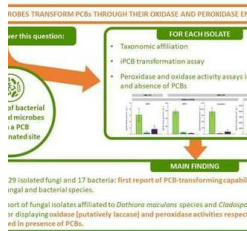


Assessment of the Presence of Transformation Products of Certain Pharmaceutical Products (Psychotropic Family) by Suspect and Non-Targeted HRMS Screening in Wastewater Treatment Plants

Authors: Reverbel S, Devier MH, Dupraz V, Geneste E et al.

Source: Toxics 11(8): 713, 2023, DOI 10.3390/toxics11080713

Abstract: Aquatic environments are the final receptors of human emissions and are therefore contaminated by molecules, such as pharmaceuticals. After use, these compounds and their metabolites are discharged to wastewater treatment plants (WWTPs). During wastewater treatment, compounds may be eliminated or degraded...

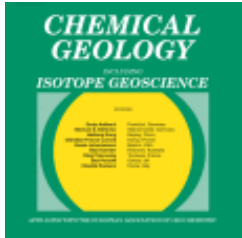


Polychlorinated Biphenyl Transformation, Peroxidase and Oxidase Activities of Fungi and Bacteria Isolated from a Historically Contaminated Site

Authors: Maucourt F, Doumeche B, Chapulliot D, Vallon L et al.

Source: Microorganisms 11(8): 1887, 2023, DOI 10.3390/microorganisms11081887

Abstract: Causing major health and ecological disturbances, polychlorinated biphenyls (PCBs) are persistent organic pollutants still recovered all over the world. Microbial PCB biotransformation is a promising technique for depollution, but the involved molecular mechanisms remain misunderstood...

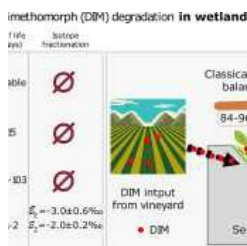


Mercury deposition in the Eastern Mediterranean: Modern fluxes in the water column and Holocene accumulation rates in abyssal sediment

Authors: Cossa D, Guedron S, Coquery M, Calafat A et al.

Source: Chemical Geology 636: 121652, 2023, DOI 10.1016/j.chemgeo.2023.121652

Abstract: Modern and past mercury (Hg) fluxes in the oceanic water column and abyssal sediments are poorly quantified. Here, we investigated the particulate transfer of Hg in the water column of the ultra-oligotrophic Ionian Sea (Eastern Mediterranean) with sediment traps during a one-year period, a...



Evaluating pesticide degradation in artificial wetlands with compound-specific isotope analysis: A case study with the fungicide dimethomorph

Authors: Gilevska T, Payraudeau S, Imfeld G

Source: Science of the Total Environment 900: 165767, 2023, DOI 10.1016/j.scitotenv.2023.165767

Abstract: Pesticide degradation in wetland systems intercepting agricultural runoff is often overlooked and mixed with other dissipation processes when assessing pesticide concentrations alone. This study focused on the potential of compound-specific isotope analysis (CSIA) to estimate pesticid...

National soil data in EU countries, where do we stand?

Authors: Cornu S, Keesstra S, Bispo A, Fantappie M et al.

Source: European Journal of Soil Science 74(4): e13398, DOI 10.1111/ejss.13398

Abstract: At the European scale, soil characteristics are needed to evaluate soil quality, soil health and soil-based ecosystem services in the context of the European Green Deal. While some soil databases exist at the European scale, a much larger wealth of data is present in individual European ...

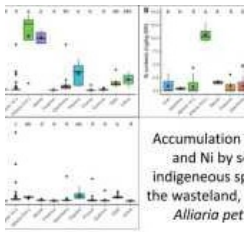


Assessment of cyanotoxins in water and fish in an African freshwater lagoon (Lagoon Aghien, Ivory Coast) and the application of WHO guidelines

Authors: Yao EK, Ahoutou MK, Olokotum M, Hamlaoui S et al.

Source: Environmental Science and Pollution Research 30(43): 97857-97871, 2023, DOI 10.1007/s11356-023-29025-3

Abstract: In comparison with northern countries, limited data are available on the occurrence and potential toxicity of cyanobacterial blooms in lakes and ponds in sub-Saharan countries. With the aim of enhancing our knowledge on cyanobacteria and their toxins in...

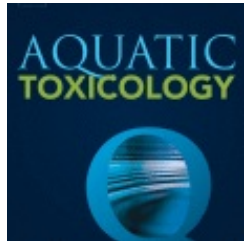


Floristic survey, trace element transfers between soil and vegetation and human health risk at an urban industrial wasteland

Authors: Collot J, Binet P, Malabad AM, Pauget B et al.

Source: Journal of Hazardous Materials 459: 132169, 2023, DOI 10.1016/j.jhazmat.2023.132169

Abstract: This study aimed to determine the trace element accumulation in the soil and plants in an industrial wasteland and to estimate the extent of transfer to humans to measure the effects on and risks to vegetation and human health and find bioindicator plants representative of the ...

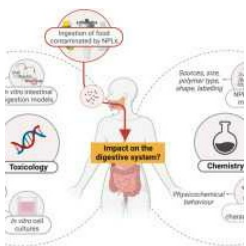


PBTK-TD model of the phagocytosis activity in three-spined stickleback exposed to BPA

Authors: Mit C, Bado-Nilles A, Turies C, Daniele G et al.

Source: Aquatic Toxicology 261: 106608, 2023, DOI 10.1016/j.aquatox.2023.106608

Abstract: Due to the high production volume and persistence in the environment of bisphenol A (BPA) and its substitutes, realistic exposure scenarios were proposed in some species to better understand the relationship between external and internal concentrations. For example, a recent PBTK model h...



Fate and impact of nanoplastics in the human digestive environment after oral exposure: A common challenge for toxicology and chemistry

Authors: Liebgott C, Chaib I, Doyen P, Robert H et al.

Source: TrAC Trends in Analytical Chemistry 166: 117175, 2023, DOI 10.1016/j.trac.2023.117175

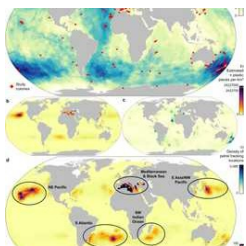
Abstract: Nanoplastics (NPLs), the presence in the environment of which was considered only "highly plausible" until recently, have become the focus of environmental and ecotoxicological studies. However, up to now, little is known about the potential risks of NPLs to human health. In...

Sublethal effects of nine insecticides on *Drosophila suzukii* and its major pupal parasitoid *Trichopria drosophilae*

Authors: Lisi F, Mansour R, Cavallaro C, Alinc T et al.

Source: Pest Management Science Early Access, 2023, DOI 10.1002/ps.7702

Abstract: Background Although the pupal parasitoid *Trichopria drosophilae* is used in conservative and augmentative biocontrol of *Drosophila suzukii* infestations, current pest management strategies mostly rely on multiple insecticide applications. In this context, the aim of the study was to investiga...



Global assessment of marine plastic exposure risk for oceanic birds

Authors: Clark BL, Carneiro APB, Pearmain EJ, Rouyer MM et al.

Source: Nature Communications 14(1): 3665, DOI 10.1038/s41467-023-38900-z

Abstract: Plastic pollution is distributed patchily around the world's oceans. Likewise, marine organisms that are vulnerable to plastic ingestion or entanglement have uneven distributions. Understanding where wildlife encounters plastic is crucial for targeting research and mitigation. Oceanic se...

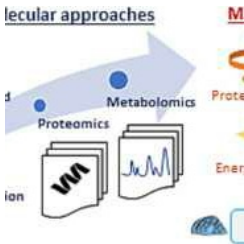


Linking ecotoxicological effects on biodiversity and ecosystem functions to impairment of ecosystem services is a challenge: an illustration with the case of plant protection products

Authors: Pesce S, Berard A, Coutellec MA, Hedde M et al.,

Source: Environmental Science and Pollution Research Early Access, 2023, DOI 10.1007/s11356-023-29128-x

Abstract: There is growing interest in using the ecosystem services framework for environmental risk assessments of chemicals, including plant protection products (PPPs). Although this topic is increasingly discussed in the recent scientific literature, there is still a SU...



Bioaccumulation and molecular effects of carbamazepine and methylmercury co-exposure in males of *Dreissena polymorpha*

Authors: Baratange C, Baali H, Gaillet V, Bonnard I et al.

Source: Science of the Total Environment 897: 165379, 2023, DOI 10.1016/j.scitotenv.2023.165379

Abstract: *Dreissena polymorpha* is a bivalve promising for biomonitoring in freshwater ecosystems thanks to its abundance and high filtration activity allowing rapid uptake of toxicants and identification of their negative effects. Nonetheless, we still lack knowledge on its...

OUVRAGES / RAPPORTS / ACTES DE CONGRES

OECD Promotes Monitoring and Regulating Endocrine Disruptors in Water

The Organisation for Economic Co-operation and Development (OECD) has published a report on endocrine disrupting chemicals (EDCs) in freshwater, wastewater, and drinking water, describing ways to monitor and regulate such chemicals. The report presents new monitoring methods, such as bioassays (cells, fish or frog embryos, or animals used to test whether a chemical, or water, is toxic) and non-targeted analysis, to capture the impacts of EDCs in water, supplementing traditional substance-by-subst...

saicmknowledge.org



Emerging Materials and Environment

Editors: Manoj Shukla, Elizabeth Ferguson, Jerzy Leszczynski

Source: Challenges and Advances in Computational Chemistry and Physics ; Springer Cham ; DOI 10.1007/978-3-031-39470-6

Abstract: This volume presents chapters integrating experimental and computational advances in materials research and discusses how the potential release of emerging materials would impact the environment. With increasing populations, there is a growing p...

link.springer.com



istock.com | GAO-23-10970

Persistent Chemicals: Detecting, Limiting Exposure To, and Treating PFAS Contamination

The Centers for Disease Control and Prevention found that most people in the U.S. have been exposed to a potentially harmful class of synthetic chemicals called per- and polyfluoroalkyl substances—PFAS, for short. These chemicals have characteristics that make them useful in products such as nonstick cookware, waterproof clothing, and firefighting foams used to extinguish aircraft fires quickly and prevent them from reigniting. Exposure to certain levels of PFAS can cause negative health effects,...

www.gao.gov

REGLEMENTATION

LMR de carbétamide, de carboxine et de triflumuron présents dans ou sur certains produits

Règlement (UE) 2023/2382 de la Commission du 29 septembre 2023 modifiant les annexes II et V du règlement (CE) no 396/2005 du Parlement européen et du Conseil en ce qui concerne les limites maximales applicables aux résidus de carbétamide, de carboxine et de triflumuron présents dans ou sur certains produits

Numéro CELEX : 32023R2382

Auteur : Commission européenne, Direction générale de la santé et de la sécurité alimentaire

Date du document : 29/09/2023

Plants de pomme de terre : entrée (provenance Royaume-Uni) et utilisation en Irlande du Nord de tubercules de *Solanum tuberosum* L. destinés à la plantation des plants et modèle d'étiquette phytosanitaire pour les plants de pommes de terre

Règlement d'exécution (UE) 2023/2091 de la Commission du 28 septembre 2023 portant modalités d'application du règlement (UE) 2023/1231 du Parlement européen et du Conseil en ce qui concerne les exigences applicables à l'entrée en Irlande du Nord en provenance d'autres parties du Royaume-Uni d'envois de tubercules de *Solanum tuberosum* L. destinés à la plantation (plants de pommes de terre), à leur utilisation en Irlande du Nord et au modèle d'étiquette phytosanitaire pour les plants de pommes d...

Etiquette phytosanitaire (Contenu et modèle) pour les végétaux destinés à la plantation autres que les plants de pommes de terre, ainsi que pour les machines et les véhicules qui ont été exploités à des fins agricoles ou forestières et entrant en Irlande du Nord à partir d'autres parties du Royaume-Uni

Règlement d'exécution (UE) 2023/2090 de la Commission du 28 septembre 2023 portant modalités d'application du règlement (UE) 2023/1231 du Parlement européen et du Conseil en ce qui concerne le contenu et le modèle d'étiquette phytosanitaire pour les végétaux destinés à la plantation autres que les plants de pommes de terre, ainsi que pour les machines et les véhicules qui ont été exploités à des fins agricoles ou forestières et entrant en Irlande du Nord à partir d'autres parties du Royaume-Uni...

Enregistrement, évaluation et autorisation des substances chimiques, ainsi que les restrictions applicables à ces substances (REACH), en ce qui concerne les microparticules de polymère synthétique

Règlement (UE) 2023/2055 de la Commission du 25 septembre 2023 modifiant l'annexe XVII du règlement (CE) no 1907/2006 du Parlement européen et du Conseil concernant l'enregistrement, l'évaluation et l'autorisation des substances chimiques, ainsi que les restrictions applicables à ces substances (REACH), en ce qui concerne les microparticules de polymère synthétique (Texte présentant de l'intérêt pour l'EEE)

C/2023/6419 Numéro CELEX:32023R2055

Auteur: Commission européenne, Direction ...

LMR de benzoate de dénatonium, de diurone, d'étoxazole, de méthomyl et de téflubenzuron présents dans ou sur certains produits

Règlement (UE) 2023/1783 de la Commission du 15 septembre 2023 modifiant les annexes II et IV du règlement (CE) no 396/2005 du Parlement européen et du Conseil en ce qui concerne les limites maximales applicables aux résidus de benzoate de dénatonium, de diurone, d'étoxazole, de méthomyl et de téflubenzuron présents dans ou sur certains produits (Texte présentant de l'intérêt pour l'EEE)

C/2023/6134

Numéro CELEX:32023R1783

Auteur: Commission européenne, Direction générale de la san...

Statistiques sur l'utilisation des produits phytopharmaceutiques qui doivent être transmises pour l'année de référence 2026 pendant le régime transitoire 2025-2027 et les statistiques sur les produits phytopharmaceutiques mis sur le marché

Rectificatif au règlement d'exécution (UE) 2023/1537 de la Commission du 25 juillet 2023 portant modalités d'application du règlement (UE) 2022/2379 du Parlement européen et du Conseil en ce qui concerne les statistiques sur l'utilisation des *produits phytopharmaceutiques* qui doivent être transmises pour l'année de référence 2026 pendant le régime transitoire 2025-2027 et les statistiques sur les *produits phytopharmaceutiques* mis sur le marché («Journal officiel de l'Union européenne...

Autorisation de l'Union pour la famille de produits biocides dénommée «Oxy'Pharm H2O2»

Règlement d'exécution (UE) 2023/1764 de la Commission du 12 septembre 2023 accordant une autorisation de l'Union pour la famille de produits biocides dénommée «Oxy'Pharm H2O2» conformément au règlement (UE) no 528/2012 du Parlement européen et du Conseil (Texte présentant de l'intérêt pour l'EEE)

C/2023/6041

Numéro CELEX: 32023R1764

Auteur: Commission européenne, Direction générale de la santé et de la sécurité alimentaire

Date du document: 12/09/2023

Autorisation de l'Union pour la famille de produits biocides dénommée «SALVECO SALVESAFE PRODUCTS»

Règlement d'exécution (UE) 2023/1758 de la Commission du 11 septembre 2023 accordant une autorisation de l'Union pour la famille de produits biocides dénommée «SALVECO SALVESAFE PRODUCTS» conformément au règlement (UE) no 528/2012 du Parlement européen et du Conseil (Texte présentant de l'intérêt pour l'EEE) C/2023/6027

Numéro CELEX: 32023R1758

Auteur: Commission européenne, Direction générale de la santé et de la sécurité alimentaire

Date du document: 11/09/2023

Prolongation de la période d'approbation des substances actives bensulfuron, chlorméquat, chlorotoluron, clomazone, daminozide, deltaméthrine, eugénol, fludioxonyl, flufénacet, flumétraline, fosthiazate, géraniol, MCPA, MCPB, propaquizafop, prosulfocarbe, quizalofop-P-éthyle, quizalofop-P-téfuryle, 5-nitroguaiacolate de sodium, o-nitrophénolate de sodium, p-nitrophénolate de sodium... tébufenpyrad, thymol et tritosul. tébufenpyrad, thymol et tritosul...

Règlement d'exécution (UE) 2023/1757 de la Commission du 11 septembre 2023 modifiant le règlement d'exécution (UE) no 540/2011 en ce qui concerne la prolongation de la période d'approbation des substances actives bensulfuron, chlorméquat, chlorotoluron, clomazone, daminozide, deltaméthrine, eugénol, fludioxonyl, flufénacet, flumétraline, fosthiazate, géraniol, MCPA, MCPB, propaquizafop, prosulfocarbe, quizalofop-P-éthyle, quizalofop-P-téfuryle, 5-nitroguaiacolate de sodium, o-nitrophénolate de...

LMR résidus d'isoxabène, de métaldéhyde, de metarhizium brunneum — souche Ma 43, de paclobutrazol et de phéromones de lépidoptères à chaîne linéaire (SCLP) présents dans ou sur certains produi

Règlement (UE) 2023/1719 de la Commission du 8 septembre 2023 modifiant les annexes II et IV du règlement (CE) no 396/2005 du Parlement européen et du Conseil en ce qui concerne les limites maximales applicables aux résidus d'isoxabène, de métaldéhyde, de metarhizium brunneum — souche Ma 43, de paclobutrazol et de phéromones de lépidoptères à chaîne linéaire (SCLP) présents dans ou sur certains produits (Texte présentant de l'intérêt pour l'EEE)

C/2023/6009

Numéro CELEX: 32023R1719

DROIT ET POLITIQUE DE L'ENVIRONNEMENT

Consultation publique : projet de décret à la délivrance du conseil stratégique prévu à l'article R. 254-26-2 du code rural et de la pêche maritime

Une consultation publique est lancée sur un projet de décret qui adapte le dispositif Certiphyto en matière phytosanitaire. Le projet de décret instaure une période transitoire allant jusqu'au 31 décembre 2027 sur le territoire métropolitain, pendant laquelle les utilisateurs professionnels de produits phytopharmaceutiques disposent d'un délai de 12 mois, sous condition et non renouvelable, pour fournir l'attestation de conseil stratégique ...

agriculture.gouv.fr

Deux appels à projets de recherche pour mieux connaître les risques sanitaires liés à l'environnement et au travail | Anses - Agence nationale de sécurité sanitaire de l'alimentation, de l'environnement et du travail

Dans le cadre du programme national de recherche environnement-santé-travail (PNR EST), l'Anses lance ce lundi 16 octobre deux appels à projets de recherche, en santé - environnement et santé - travail, et sur le thème des radiofréquences. L'enjeu : mieux appréhender des questions encore peu étudiées mais considérées comme d'importance majeure pour la santé humaine et les écosystèmes. Des projets pluridisciplinaires intégrant des dimensions socio-économiques et des approches globales sont très at...

www.anses.fr

Le débat sur le glyphosate à nouveau sur la table en Europe

En proposant de reconduire pour dix ans l'autorisation du glyphosate dans l'Union européenne, la Commission a relancé le débat sur la substance controversée. Après une première réunion ce vendredi 22 septembre, les Etats membres doivent se prononcer sur cette décision le 13 octobre.

www.touteurope.eu

Reducing pollution in EU groundwater and surface waters

On Tuesday, Parliament adopted its position on reducing groundwater and surface waters pollution and improving EU water quality standards.

www.europarl.europa.eu

REVUE DE PRESSE

Pesticides : le constat d'un échec gouvernemental

Nos organisations dénoncent l'incapacité du gouvernement à réduire l'usage des pesticides en France et demandent un plan réellement efficace pour diminuer la dépendance de l'agriculture vis à vis des produits phytosanitaires.

www.generations-futures.fr

[Herbicides] Arrêt du glyphosate en Bretagne ? La chambre d'agriculture dit non à la Région

Loïg Chesnais-Girard, président de la région Bretagne, a exprimé le souhait de faire de la Bretagne une région pilote pour l'arrêt total du glyphosate. À la suite de cette déclaration, la chambre d'agriculture a opposé un désaccord fondé sur les recherches qu'elle mène depuis 25 ans.

www.terre-net.fr

Étude internationale sur la cancérogénicité du Glyphosate : découvertes inquiétantes sur la leucémie chez les rats.

Des résultats qui doivent remettre en question la ré-autorisation du glyphosate en Europe Une étude toxicologique internationale multi-institutionnelle sur le glyphosate et les herbicides à base de glyphosate a découvert que de faibles doses d'herbicides à base de glyphosate provoquent une leucémie chez le rat, la moitié des décès dus à la leucémie identifiée dans les groupes d'étude ayant eu lieu à un âge précoce.

www.generations-futures.fr



Règlement pesticides SUR : un bilan mitigé mais porteur d'espoir du vote en commission environnement

Le 24 octobre, la commission Environnement (ENVI) du Parlement européen s'est prononcée sur le règlement pour l'usage durable des pesticides (SUR).

www.generations-futures.fr

Glyphosate », médias et politique : la science inaudible et déformée

La controverse autour du glyphosate, un herbicide largement utilisé dans l'agriculture et commercialisé en France en 1974 sous le nom de Roundup par la société Monsanto 1 (rachetée par Bayer en 2018), est devenue emblématique de la désinformation dans le débat public. L'Afis rappelle qu'elle ne se prononce pas sur la décision qu'il convient de prendre en termes d'autorisation, de restriction d'usage ou d'interdiction du produit. Il s'agit là, en effet, de choix d'ordre politique qui relèvent de ...

www.afis.org



PFAS : pour une interdiction universelle !

Mercredi 11 octobre, Générations Futures et des ONG européennes manifestaient devant la Commission européenne contre les substances per- et poly-fluoroalkylées : les PFAS ou "polluants éternels", omniprésents dans tous les milieux. Elles réclament leur interdiction.

www.generations-futures.fr



Interdictions votées pour le S-métolachlore et 5 pesticides suspectés d'être des perturbateurs endocriniens !

Les 12 et 13 octobre 2023, le vote sur le glyphosate a éclipsé le rejet du renouvellement de six substances actives controversées : les S-metolachlore, Asulam sodium, benthialicarb, clofentezine, metiram et triflusaluron-méthyl.

www.generations-futures.fr

Phytos et leucémies infantiles : les risques liés aux vignes proches précisés

Les enfants risquent-ils plus de leucémies quand ils vivent à proximité de vignes ? Une étude française apporte des réponses nuancées, en fournissant un nouvel éclairage sur les liens entre santé et pesticides.

www.agri-mutuel.com

Une étude de l'Inserm s'intéresse au lien entre le risque de leucémie pédiatrique et le fait d'habiter à proximité de vignes

Comprendre les conséquences d'une exposition environnementale aux pesticides, et notamment l'impact sur la santé, est actuellement un enjeu de santé publique. Si de nombreuses études épidémiologiques pointent du doigt le risque d'une exposition domestique et professionnelle[1] sur la santé des enfants, les données demeurent limitées concernant les risques pour les riverains de parcelles agricoles traitées aux pesticides. Une nouvelle étude de l'Inserm, menée par des scientifiques au sein du labor...

presse.inserm.fr



L'Anses sévit contre un herbicide pour protéger les enfants

En pleine saison de désherbage dans les champs de céréales, les agriculteurs qui utilisent du prosulfocarbe — le deuxième herbicide le plus utilisé, après le glyphosate — vont devoir revoir leurs pratiques. La raison ? Protéger les enfants riverains d'une exposition potentiellement dangereuse. Au terme d'une nouvelle évaluation des risques de ce pesticide, l'Agence nationale de sécurité sanitaire (Anses) a constaté que les seuils de sécurité pouvaient être dépassés pour les enfants, principalement...

reporterre.net



Glyphosate : des ONG accusent Bayer d'avoir omis des données défavorables

Un collectif d'ONG accuse le groupe chimique allemand Bayer d'avoir omis des données dans le cadre d'une enquête pénale sur les risques liés à l'utilisation du glyphosate, un herbicide controversé que Bruxelles a proposé de reconduire pour 10 ans.

www.terre-net.fr

Water pollution: Updating EU regulations. What happened, what it means and what remains to be done

Our water courses are under serious threat. Among these, chemical pollution stands out as a diverse and far-reaching pressure. In Europe at the moment, only 38% of surface waters are considered to have a healthy chemical status. Recently the European Parliament voted to improve proposals by the European Commission. Now it is up to the Member States in the EU Council to make progress. Our water courses are under serious threat. Among these, chemical pollution stands out as a diverse...

www.pan-europe.info

[Herbicide] Prosulfocarbe : l'Anses impose une zone-tampon d'au moins 10 mètres

L'Agence de sécurité sanitaire (Anses) a annoncé mardi l'obligation pour les agriculteurs utilisant l'herbicide prosulfocarbe de respecter une zone tampon d'au moins dix mètres et de diminuer les dosages après une nouvelle évaluation des risques ne pouvant exclure un dépassement des seuils de sécurité pour les enfants.

www.terre-net.fr

Swimming in glyphosate: Analysis of official glyphosate and AMPA data in Spanish waters in 2021 and 2022

As Spain is about to vote on whether to confront its population and nature with another 10 years of glyphosate (active substance of herbicides such as Roundup), the official analyses of Spanish water bodies speak clearly: in 2022, 34.6% of Spanish surface waters were contaminated by glyphosate in a concentration that does not comply with the environmental quality standard. Regarding AMPA, the main toxicant generated in the degradation of glyphosate, 13.7% of the sampling points were contaminated....

www.pan-europe.info

[« Justice pour le vivant »] Les ONG font appel pour contraindre l'Etat sur les produits phytos

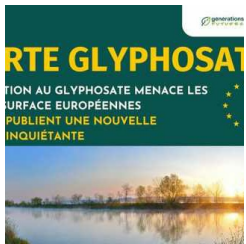
Les ONG qui ont obtenu fin juin une condamnation historique de l'Etat sur l'effondrement de la biodiversité ont annoncé jeudi faire appel pour obtenir qu'il soit contraint à revoir ses méthodes d'autorisation des produits phytopharmaceutiques.

www.terre-net.fr

Romania gives green light for mass extinction of bees

Romania does not respect EU law. In January 2023 the European Court of Justice issued a crystal clear ruling: the widespread use of derogations to allow the use of banned pesticides is violating the EU pesticide law. The general use of this emergency provision – until then practised in most EU countries – is not allowed. Most countries accepted the Court ruling and stopped giving new ones. Not Romania. The Ministry of Agriculture recently granted emergency use authorisations for three neonicotino...

www.pan-europe.info



Glyphosate et pollution de l'eau : publication d'un nouveau rapport

La pollution au glyphosate menace les eaux de surface européennes : nos ONG publient une nouvelle enquête inquiétante (1). A l'heure où l'autorisation du glyphosate expire et que des discussions importantes sur son devenir vont se tenir le 15 septembre, avec un vote possible en octobre, nous demandons à l'Union européenne d'interdire cet herbicide pour protéger la qualité de l'eau et les écosystèmes aquatiques.

www.generations-futures.fr



Ecotone et Solagro calculent « l'empreinte pesticides » de l'alimentation

Un nouvel outil en ligne [développé par la fondation Ecotone en partenariat avec l'association Solagro] permet au consommateur de visualiser l'impact de son assiette sur la contamination en pesticides des surfaces agricoles. Une sensibilisation aux actions concrètes pour préserver la biodiversité.

www.processalimentaire.com