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Bulletin de veille du réseau d'écotoxicologie terrestre et aquatique

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Réalisé par l'équipe de veille sur la période du 1er Novembre au 31 Décembre 2025.
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Edito

Voici notre 78ème bulletin de veille, que 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.

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

Contact : veille-ecotox@inrae.fr

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- Pesticide residues as contaminants in agricultural soils
- BB-REG-NET Report Finds Biodegradable Plastics Can Mitigate Long-Term Environmental Impacts of Conventional Plastics
- New report: Chemical pollution driving men’s health crisis
- Patterns and thresholds for soil pH across Europe in relation to soil health and degradation

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- Décret n° 2025-1237 du 17 décembre 2025 révisant et complétant le tableau de maladies professionnelles n° 58 annexé au livre VII du code rural et de la pêche maritime
- Arrêté du 17 décembre 2025 établissant la liste des substances définies à l'article L. 213-10-8 du code de l'environnement relatif à la redevance pour pollutions diffuses - Légifrance
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- Improving environmental risk assessment of pesticides: mapping crop development as function of calendar date across the EU for use in the EU regulatory framework Establishing a link between BBCH crop growth stages, calendar dates and degree-days for a set of selected crops in Europe

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- Stratégie Ecophyto 2030 : Appel à projets "Territoires de convergence eau potable et Natura 2000"
- Lutte contre l’antibiorésistance : plus de 2 M€ pour financer 19 projets dans le cadre du plan Ecoantibio
- Axe 3 - Protéger les captages pour réduire les risques pour la santé et l'environnement
- Appel à projets Territoires de convergence eau potable et Natura 2000 : initiatives pour réduire l’impact des produits phytopharmaceutiques

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- Qu’est-ce qui change au 1er janvier 2026 pour les agriculteurs ?
- La Commission européenne lâche du lest sur les autorisations de pesticides
- Pesticides : quelles simplifications prévoit Bruxelles pour les substances actives et de réciprocité pour les produits importés ?
- Omnibus VII sur la sécurité alimentaire (pesticides et biocides) : 90% des pesticides pourraient avoir des autorisations illimitées !
- Santé des sols : que va changer la nouvelle directive adoptée par l’UE pour les agriculteurs ?
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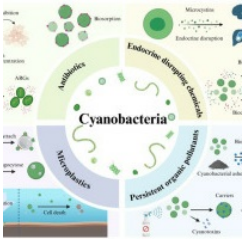
- Une stratégie innovante de biocontrôle basée sur les odeurs pour protéger les cultures sous serre
- [hal-05345232] Stage-specific effects of a fungicide and global warming on copper accumulation and development in a major vineyard insect pest
- Loi Duplomb : le poisson zèbre est un outil d’alerte précoce
- Un rapport sur les produits phytosanitaires fait débat

Brochure du réseau EcotoxicoMic "Ecologie Microbienne : Les réponses des microorganismes face aux micropolluants"

Téléchargeable ici: https://ecotoxicomic.org/discover-the-power-of-microbial-ecotoxicology-ecotoxicomics-new-brochure-unveils-key-insights-into-microorganisms-answers-to-pollutants/

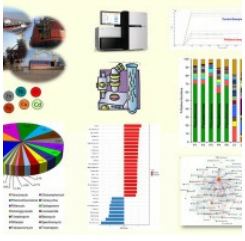
Response of freshwater periphytic diatoms to elevated cadmium concentration: results of an experimental study

Authors: Petrėnas G, Kazlauskas M, Karosiene JSource: JOURNAL OF LIMNOLOGY 84:2230, 2025, DOI 10.4081/jlimnol.2025.2230Abstract: The study emphasises the importance of periphytic freshwater diatoms as bioindicators for assessing the impact of cadmium pollution on aquatic ecosystems. This approach offers significant advantages for the detection of ecological changes, such as shifts in diatom species diversity and community composition, as well as morphological changes, thus contributing to a deeper understanding of metal-related environmental risks. The aim of the study was to determine the effects of cadmium on the diversity and structure of periphytic diatom communities under laboratory conditions, and to evaluate the use of diatoms as bioindicators for cadmium exposure...



Interactions between cyanobacteria and emerging contaminants in aqueous environments

Authors: Yang YC, Zhang XH, Tan LS et al.Source: AQUATIC TOXICOLOGY 290:107621, 2026, DOI 10.1016/j.aquatox.2025.107621Abstract: Cyanobacteria, prevalent in aquatic environments, are key contributors to the Earth's primary productivity and have historically transformed the planet's surface from anaerobic to aerobic conditions. However, due to improper disposal, a large number of emerging contaminants (ECs) were released into water bodies, which influenced the growth and physiological activities of cyanobacteria. Given the biological representativeness of cyanobacteria, their response to ECs serves as a model for understanding the impact of environmental stressors on other organisms. Thus, this review summarized the effects of ECs, including antibiotics, endocrine disrupting chemicals, persistent organic pollutants, and microplastics on cyanobacterial growth, morphology, and toxin production...

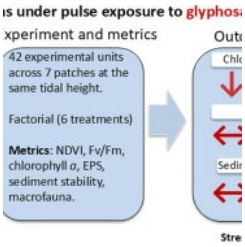


Structural and functional responses of microbial communities in coastal sediments towards anthropogenic pollution caused by ship breaking activities

Authors: Patel AB, Jain KR, Gupta V et al.Source: MARINE ENVIRONMENTAL RESEARCH 213:107665, 2025, DOI 10.1016/j.marenvres.2025.107665Abstract: Coastal ecosystems, like many others on the planet, face chronic threats from anthropogenic activities. The Alang-Sosiya Ship Breaking Yard located near Bhavnagar in Gujarat, India, represents one such ecosystem impacted by decades of ship-breaking activities. This study aimed to assess the differences in microbial community composition between polluted coastal samples and pristine samples through high-throughput sequencing. Additionally, microbial co-occurrence networks and genes related to antibiotic and heavy metal resistance were predicted using metagenome mining...

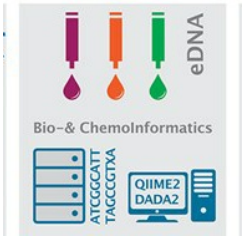
Global meta-analysis of river bacterial communities and responses to human activities

Authors: Tan QY, Wang X, Xing YZ et al.Source: JOURNAL OF ENVIRONMENTAL MANAGEMENT 395:127658, 2025, DOI 10.1016/j.jenvman.2025.127658Abstract: River microorganisms play a pivotal role in ecological and biogeochemical processes. However, human activities, by altering environmental conditions or directly introducing human-related microorganisms, significantly affect the composition and function of river microbial communities. There remains considerable uncertainty about the influences of human activities, particularly land use and wastewater discharge, on river microorganisms, with few studies addressing these issues within a comprehensive framework on the global scale. Our study employed meta-analysis to quantify the global response of river microbial communities to human activities...



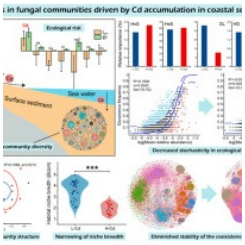
Response of natural estuarine microphytobenthic biofilms to multiple anthropogenic stressors

Authors: Rimmer JEV, Blight AJ, Chocholek M, Paterson DMSource: ENVIRONMENTAL POLLUTION 387:127285, 2025, DOI 10.1016/j.envpol.2025.127285Abstract: Estuarine ecosystems are subject to multiple anthropogenic stressors, yet their combined effects on sediment microbial communities remain poorly understood. Microphytobenthic biofilms (MPB) play a critical role in primary production and sediment stabilisation, influencing ecosystem functions and underpinning estuarine food webs. In this field study, we examined the interactive effects of glyphosate and titanium dioxide nanoparticleson MPB in a temperate estuary. We assessed MPB biomass (chlorophyll a), photosynthetic efficiency (Fv/Fm), extracellular polymeric substances (EPS), and sediment stability over 13 days...



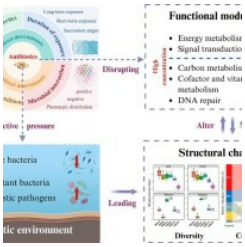
Bacterial community responses to micropollutants in chemically stressed small rivers in Kenya using environmental DNA

Authors: Verbücheln N, Schaufelberger S, Cardis T et al.Source: FEMS MICROBIOLOGY LETTERS 372:fnaf113, 2025, DOI 10.1093/femsle/fnaf113Abstract: The responses of bacterial communities to changing environmental conditions are manifold but can include structural as well as functional alterations depending on the environmental stressors and toxic chemicals they are exposed to (e.g. pharmaceuticals, personal care products, pesticides, and industrial chemicals). In this study, environmental DNA was extracted from surface water samples collected from four small rivers in the Lake Victoria South Basin (Western Kenya) to (i) evaluate whether alpha- and beta-diversity change in dependency of land-use types, (ii) identify the environmental variables that explain alterations in community structure, (iii) qualitatively and quantitatively assess the consequences of antimicrobial stress on bacterial communities, and (iv) evaluate bacterial functional changes related to the degradation of organic chemicals...



Exploring the potential ecological risks of cadmium accumulation in coastal sediments: implications for diversity, function, and assembly of fungal community

Authors: Yu CF, Du W, Meng K et al.Source: JOURNAL OF ENVIRONMENTAL MANAGEMENT 395:127726, 2025, DOI 10.1016/j.jenvman.2025.127726Abstract: Understanding how cadmium (Cd) accumulation affects microbial community assembly and species coexistence is critical for revealing the diversity and functional evolution of ecosystems under pollution stress. This study identified Cd as the predominant ecological risk factor in coastal sediments, as determined by the Geoaccumulation Index and the Potential Ecological Risk Index...



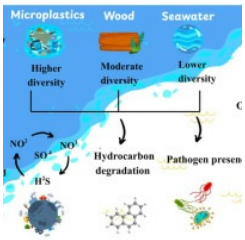
Ecological effects of antibiotics on aquatic microbial communities: Structure-function response dynamics and multifactorial drivers

Authors: Hu YN,; Gai N, Yuan ZM et al.Source: CHEMICAL ENGINEERING JOURNAL 525:169822, 2025, DOI 10.1016/j.cej.2025.169822Abstract: Antibiotics profoundly impact aquatic microbial communities, though their ecological effects remain incompletely understood. This review adopts a "structure-function coupling" perspective to analyze microbial response dynamics and driving mechanisms. Structurally, antibiotics significantly alter community composition and diversity by inhibiting sensitive taxa (e.g., Actinobacteria) and enriching resistant groups (e.g., Proteobacteria). Functionally, antibiotics inhibit key functional taxa, such as cyanobacteria and ammonia-oxidizing bacteria, thereby impairing energy metabolism and nutrient cycling processes. However, communities can enhance resilience by upregulating mechanisms such as reinforced carbon metabolism and DNA repair...

ERA / PUBLICATIONS SCIENTIFIQUES / PLASTIQUES

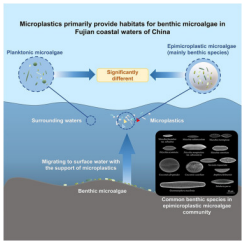
Combined Impact of Nanoplastics and Temperature on Green Algae: Implications for Growth, Lipid Content and Organic Exudates

Authors: Yaripour S, Ghimire S, Ignatev A et al.Source: ENVIRONMENTAL MICROBIOLOGY REPORTS 17:e70246, 2025, DOI 10.1111/1758-2229.70246Abstract: Freshwater ecosystems are under significant environmental stress due to warming and plastic pollution. However, our understanding of their combined effects on primary producers is scarce. We investigated the effects of plain spherical polymethylmethacrylate nanoparticles (NPs) and the acute temperature increases on the growth and fatty acid content of th...



Substrate-driven microbial diversity and functional potential of plastisphere biofilms in a dynamic coastal ecosystem of northeastern Taiwan

Authors: Muthu P, Bairoliya S, Girija GK et al.Source: ENVIRONMENTAL POLLUTION 389:127382, 2026, DOI 10.1016/j.envpol.2025.127382Abstract: Increasing plastic waste in marine ecosystems has led to the emergence of plastic-associated microbial communities, i.e., plastisphere biofilms. Understanding plastisphere ecology and its environmental impacts is critical for addressing challenges posed by plastic pollution. This study investigated microbial community structure and predicted functions associat...

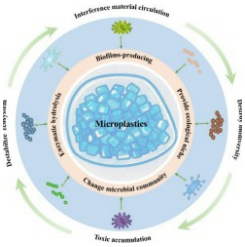


Microplastics primarily provide habitats for benthic microalgae in Fujian coastal waters of China

Authors: Wang K, Peng CH, Lin H et al.Source: ISCIENCE 28:113762, 2025, DOI 10.1016/j.isci.2025.113762Abstract: Microplastics (MPs) serve as habitats and vectors for microalgae-termed epimicroplastic microalgae (EMPMA). This study analyzed the community structure and diversity of EMP-MA in three bays of Fujian Province, and compared them with planktonic microalgae communities...

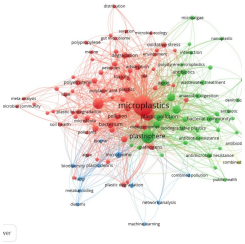
Combined effects of application-specific plastic composition and environmental conditions on algal pigments and microbial activity of freshwater biofilms

Authors: Touchet CM, Mermillod-Blondin F, Quinones-Rivera ZJ et al.Source: ENVIRONMENTAL POLLUTION 387:127323, 2025, DOI 10.1016/j.envpol.2025.127323Abstract: Plastic pollution is extremely complex due to the variety of materials resulting from the mixing of synthetic polymers and chemical additives to match their intended applications. Such application-dependent chemical compositions complicate the assessment of plastics' ecotoxicological effects and impacts on biological communities and ecosyst...



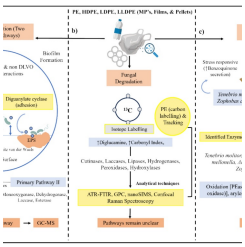
Microplastics and microbial interactions in marine environments: A critical review on biogeochemical cycling and ecological impacts

Authors: Wang JY, Zhang TR, Li YZ et al.Source: MARINE POLLUTION BULLETIN 222:118891, 2025, DOI 10.1016/j.marpolbul.2025.118891Abstract: Marine microplastic pollution has emerged as a critical global environmental challenge, exerting multifaceted impacts on marine ecosystems through intertwined physicochemical and biological processes. This review integrates bibliometric analysis (2015-2025) with mechanistic synthesis to examine the bidirectional interactions between microplastics and marine micr...



Microplastic surface biofilms: a review of structural assembly, influencing factors, and ecotoxicity

Authors: Chen H, Wang XW, Yin HY et al.Source: FRONTIERS IN MARINE SCIENCE 12:1701766, 2025, DOI 10.3389/fmars.2025.1701766Abstract: As plastic pollution continues to escalate, the widespread presence and potential hazards of microplastics as an emerging global contaminant have drawn increasing attention. In natural environments, microplastic surfaces are prone to colonization by microbial biofilms composed of microorganisms and extracellular polymeric substances (EPS), forming a distinct microec...



A comprehensive review on microbial degradation of polyethylene plastics: ecotoxicity, deterioration process, recurrent intermediates and key enzymes involved

Authors: Paulraj VD, Narayanasamy SSource: ARCHIVES OF MICROBIOLOGY 207:331, 2025, DOI 10.1007/s00203-025-04527-5Abstract: Plastic contamination is a universal threat that affects the flora and fauna in the environment. This review focuses on biodegradation of polyethylene (PE). PE is a widely used plastic in food packaging, agricultural materials (mulch films) and disposable single-use plastic bags owing to its durability and cost-effectiveness. Being a hydrophobic, recalcitrant and persistent p...

Microplastics Affect Sediment Phosphorus Transformation: Based on the Interplay of Bioturbation and Microbial Regulation

Authors: Chen ML, Feng YY, Duan JJ et al.Source: ECOSYSTEM HEALTH AND SUSTAINABILITY 11:0426, 2025, DOI 10.34133/ehs.0426Abstract: Anthropogenic activities frequently cause the accumulation of phosphorus (P) and microplastics (MPs) in river sediments. MP contamination can alter the transformations of sediment phosphorus, thereby elevating the risks of river eutrophication and impeding ecosystem health. Notably, the environmental behavior of MPs can be changed by benthic animals. Nevertheless, it ...

PESTICIDES ET SANTE DES AGRICULTEURS

From Fields to Homes: How Agricultural Pesticides Contaminate Residential Environments? Findings from the PESTIPREV Study, France

Authors: Teysseire R, Proust-Lima C, Devier MH, Barron E et al.Source: WATER AIR AND SOIL POLLUTION 237(3): 150, 2026, DOI 10.1007/s11270-025-08696-3Abstract: Pesticide sprayings on crops can contaminate nearby homes, yet factors driving pesticide penetration indoors remain poorly understood. Our objective was to study the influence of factors related to air exchange and occupants track-in on agricultural pesticide surface loadings (SLs) measured in homes near vineyards. Indoor surface wipes were...

Practical application of BREAM2 in bystander/resident spray drift exposure assessments: accounting for variations in water volume

Authors: Bürling K, Felkers E, Kuster CJ, Wright-Williams SL et al.Source: JOURNAL OF CONSUMER PROTECTION AND FOOD SAFETY, 2025, DOI 10.1007/s00003-025-01589-xAbstract: The EFSA 2022 guidance on non-dietary human exposure, including operators, workers, residents and bystanders, relies on output from the original BREAM model, including simplified extrapolation for different application volumes. This study aims to present the current limitations and challenges in the European Plant Protection Produ...

Alert Results Cause-specific mortality among banana plantation workers in the French West Indies Context Sensitive Links 8 of 42 Cause-specific mortality among banana plantation workers in the French West Indies

Authors: Luce D, Gambaretti J, Michineau L, Multigner L et al.Source: OCCUPATIONAL AND ENVIRONMENTAL MEDICINE 82(10): 512-518, 2025, DOI 10.1136/oemed-2025-110304Abstract: To describe cause-specific mortality patterns of banana plantation workers in the French West Indies. The study included 11 221 farmers and farm workers who had work in banana cultivation in the French West Indies (Guadeloupe or Martinique) between 1973 and 1993, followed up from January 1981 to December 2017. We calculated sta...

Pesticide residues in bedroom dust: occurrence, determinants, and health risk assessment

Authors: Friedman A, Falakdin P, Govande A, Gommers G et al.Source: ENVIRONMENTAL POLLUTION 387: 127306, 2025, DOI 10.1016/j.envpol.2025.127306Abstract: Settled dust in bedrooms-spaces where individuals spend substantial time-can act as a reservoir for pesticide residues. This study analyzed floor dust from 112 bedrooms in Belgium and the Netherlands to assess pesticide levels in relation to two factors: proximity to agricultural fields and the presence of pets, alongside a cumulative health risk...

Prenatal Exposure to Emerging Pesticides and Childhood Allergy Risk: A Mixture Assessment in an Urban Birth Cohort

Authors: Gomez-Olarte S, Roder S, Borte M, Krauss M et al.Source: ENVIRONMENTAL SCIENCE & TECHNOLOGY LETTERS 12(12): 1611-1617, 2025, DOI 10.1021/acs.estlett.5c00836Abstract: Pesticide gestational exposure may contribute to the development of allergies in childhood, yet evidence on its health impact on urban populations remains limited. This study investigates the association between prenatal exposure to individual and mixed pesticides and allergic outcomes, including asthma, wheezing, and ec...

Spray drift in arboriculture: A dataset to analyse the influence of spray application techniques, anti-drift nets, and their combinations on the reduction of sedimentary drift, aerial drift and exposure of bystanders

Authors: Hudebine Y, Verpont F, Vergès A, Codis S et al.Source: DATA IN BRIEF 63: 112202, 2025, DOI 10.1016/j.dib.2025.112202Abstract: In 2021 and 2022, the national and cross-sector project CAPRIV funded by the French Agriculture Ministry, made it possible assess the influence of application techniques associated or not with a hedge, or an anti-drift net on spray drift and bystander exposure. The acronym CAPRIV stands for "Concilier l'application des PPP et la protection des riverains" (Reconci...

The Human Biomonitoring Project of the Valencian Region, Spain (BIOMOVAL): Study Design, Sampling, Fieldwork Results and Lessons Learned

Authors: Fernández SF, Dualde P, Lacomba I, Yusà V et al.Source: EXPOSURE AND HEALTH 18(1):2, 2025, DOI 10.1007/s12403-025-00737-wAbstract: Human biomonitoring (HBM) studies the concentration of chemical contaminants in human samples (urine, blood, hair, etc.), considering all potential routes of exposure (inhalation, ingestion and dermal contact). The BIOMOVAL project (2021-2024) is presented in detail as the first representative HBM study of the working adult population (18-65 years old) in th...

Estimating the half-life of Ethylenethiourea from the urine of garlic farmers in northern Thailand: Characterizing the optimal window for biomonitoring to improve exposure assessment

Authors: Martin N, Tipubon K, Amornlertwatana Y, Watcharakawin R et al.Source: INTERNATIONAL JOURNAL OF HYGIENE AND ENVIRONMENTAL HEALTH 271:114696, 2026, DOI 10.1016/j.ijheh.2025.114696Abstract: Ethylenebisdithiocarbamates (EBDCs) such as maneb and mancozeb are a widely used class of fungicides essential to the protection of economically valuable crops and are believed to pose significant health risks to farmworkers. Ethylenethiourea (ETU) is a reliable biomarker of exposure to EBDC; however, cu...

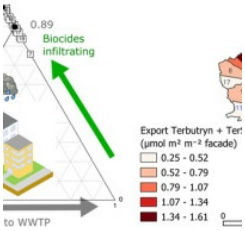
Alert Results Sex-Specific Associations of Early Life Exposure to the Pesticide Mixture with Cardiometabolic Outcomes in CHAMACOS Young Adults Context Sensitive Links 5 of 43 Sex-Specific Associations of Early Life Exposure to the Pesticide Mixture with Cardiometabolic Outcomes in CHAMACOS Young Adults

Authors: Hu CY, Mora AM, Gunier RB, Rauch S et al.Source: ENVIRONMENTAL SCIENCE & TECHNOLOGY 59(44):23702–23713, 2025, DOI 10.1021/acs.est.5c06486Abstract: Agricultural pesticide exposure has been linked to cardiometabolic health, but little is known about the long-term effects of exposure to pesticide mixtures during sensitive developmental periods. We examined prenatal and early childhood exposure to agricultural pesticide use within one km of residences in the CHAMACOS cohort (n = 505) in ...

PUBLICATIONS DU RESEAU ECOTOX

Effects of sulfur fertilizers applied at agronomic rates on cadmium availability in agricultural soils: Insights from a batch experiment

Authors: Vidal A, Nguyen C, Janot N, Eon P et al.Source: PEDOSPHERE 35(6): 995-1004, 2025, DOI 10.1016/j.pedsph.2024.07.009Abstract: Cadmium (Cd) is a toxic trace metal that occurs naturally in agricultural soils and can accumulate in the edible parts of crops, notably in cereal grains. This study investigated the extent to which sulfur (S) fertilization increases the availability of Cd in a calcareous (Calc) and a non-calcareous (Ncalc) soil. Changes in Cd availability and speciation were monito...

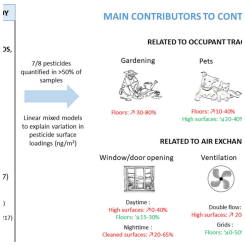


Estimating current and future urban biocide emissions from building facades at the city scale

Authors: Sereni L, Imfeld G, Payraudeau SSource: ENVIRONMENTAL POLLUTION 388: 127373, 2026, DOI 10.1016/j.envpol.2025.127373Abstract: Cities are pivotal to climate change mitigation and environmental sustainability, yet controlling urban pollutant emissions from buildings remains a major challenge. Among these, biocides such as terbutryn pose significant ecotoxicological risks, particularly within stormwater systems. To quantify biocide emissions from building facades, as well as their transport ...

Cyantraniliprole-mediated transgenerational hormesis in the invasive tomato pinworm, Tuta absoluta

Authors: Ullah F, Güncan A, Gul H, Li XW et al.Source: PEST MANAGEMENT SCIENCE 81(12): 8344-8355, 2025, DOI 10.1002/ps.70136Abstract: BACKGROUND Hormesis, a biphasic dose-response phenomenon, is gaining recognition for its bioregulatory and practical implications. Invasive species present a critical context for studying hormesis, because sublethal population-level responses may facilitate establishment and spread, particularly when transgenerational effects are involved. The invasive South Americ...



From Fields to Homes: How Agricultural Pesticides Contaminate Residential Environments? Findings from the PESTIPREV Study, France

Authors: Teysseire R, Proust-Lima C, Devier MH, Barron E et al.Source: WATER AIR AND SOIL POLLUTION 237(3): 150, 2025, DOI 10.1007/s11270-025-08696-3Abstract: Pesticide sprayings on crops can contaminate nearby homes, yet factors driving pesticide penetration indoors remain poorly understood. Our objective was to study the influence of factors related to air exchange and occupants track-in on agricultural pesticide surface loadings (SLs) measured in homes near vineyards. Indoor surface wipes wer...

From Legacy to Emerging Groundwater Contaminants: Combining Advanced Monitoring Tools to Assess Sources and In Situ (Bio)Transformation

Authors: Prieto-Espinoza M, Hohener P, Imfeld G Source: ES&T WATER Early Access, 2025, DOI 10.1021/acsestwater.5c00552Abstract: Aquifers worldwide are under increasing pressure from the widespread use of synthetic chemicals, many of which, alone or as a mixture, are persistent, mobile, and toxic. Legacy and emerging organic contaminants pose major challenges for groundwater remediation, often involving substantial cleanup costs and requiring efficient monitoring strategies to trace their sour...

Spray drift in arboriculture: A dataset to analyse the influence of spray application techniques, anti-drift nets, and their combinations on the reduction of sedimentary drift, aerial drift and exposure of bystanders

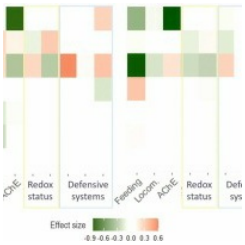
Authors: Hudebine Y, Verpont F, Vergès A, Codis S et al.Source: DATA IN BRIEF 63: 112202, 2025, DOI 10.1016/j.dib.2025.112202Abstract: In 2021 and 2022, the national and cross-sector project CAPRIV funded by the French Agriculture Ministry, made it possible assess the influence of application techniques associated or not with a hedge, or an anti-drift net on spray drift and bystander exposure. The acronym CAPRIV stands for "Concilier l'application des PPP et la protection des riverains" (Reconcil...

Impact of chlordecone pollution on biodiversity: The blind spot of 15 years of public policy in the French West Indies

Authors: Sanchez W, Pesce S, Betoulle S, Charles S et al.Source: PEER COMMUNITY JOURNAL 5: e114, 2025, DOI 10.24072/pcjournal.634Abstract: For many years, there has been an unprecedented decline in biodiversity on a global scale, triggered largely by the use of plant protection products. In this context, a collective scientific assessment was conducted to identify current consensus knowledge and further needs regarding the impacts of plant protection products on biodiversity and ecosystem service...

A new definition of human health is needed to better implement One Health

Authors: Lefrançois T, Angot JL, Autran B, Bukachi SA et al.Source: LANCET 406(10504): 672-675, 2025, DOI 10.1016/S0140-6736(25)01015-3Introduction: Since the COVID-19 pandemic, One Health approaches1 have revived attention to the interdependence of human, animal, and ecosystem health. However, human health is still predominantly viewed through the prism of disease affecting humans and related care activities, as illustrated by health expenditure and health regulation. This approach is now overly...



Combined effects of parasitism and anthropogenic stressors on behaviour and biomarkers in the freshwater amphipod Gammarus fossarum: Dominant and additive effects prevail

Authors: Perrot-Minnot MJ, Geffard O, Caillot G, Noury P et al.Source: ECOTOXICOLOGY AND ENVIRONMENTAL SAFETY 305: 119220, 2025, DOI 10.1016/j.ecoenv.2025.119220Abstract: Chemical contaminants, elevated temperature, and parasitism are expected to impose multiple stresses on aquatic organisms. Their sublethal effects on fitness may be mediated through multiple traits, and combine in additive or interactive ways. In freshwater ecosystems, at least half of paired-stressor effects are either additive...

Impacts of Plant Protection Products on Biodiversity: Limits of Risk Assessment and Avenues to Ground Liability

Authors: Leenhardt S, Mamy L, Barthélémy C, Berny P et al.Source: RISK ANALYSIS Eraly Access, 20525, DOI 10.1111/risa.70129Abstract: Plant protection products (PPPs) are intended to protect plants against pests. However, they are also known to contribute unequivocally to the decline of biodiversity due to their negative impact on biological groups such as terrestrial invertebrates, birds, and amphibians. At the intersection of ecotoxicology, social sciences, and law, numerous studies address the ...

OUVRAGES / RAPPORTS / ACTES DE CONGRES

IARC Monographs evaluation of the carcinogenicity of atrazine, alachlor, and vinclozolin

The results of the recent IARC Monographs evaluation of three pesticides – the herbicides atrazine and alachlor and the fungicide vinclozolin – have now been published in The Lancet Oncology. The summary article presents the conclusions of IARC Monographs Meeting 140.

www.iarc.who.int

Pesticide residues as contaminants in agricultural soils

In this chapter, we focus on soil-pesticide monitoring data, emphasizing key findings and challenges such as legacy contamination and the interpretation of results. We also discu...SILVA Vera; RIEDO Judith; VIEIRA Diana; USTINOV Sergejus; KOTSCHIK Pia; et al

publications.jrc.ec.europa.eu

BB-REG-NET Report Finds Biodegradable Plastics Can Mitigate Long-Term Environmental Impacts of Conventional Plastics

On October 14, 2025, BB-REG-NET, a United Kingdom (UK) regulatory science network for biobased and biodegradable materials, published a report entitled “Addressing Persistent Plastic Pollution: The Case for Biodegradable Solutions.” Alder BioInsights conducted a literature review of the evidence around the presence, impact, and persistence of microplastics in the open environment due to the use of biodegradable materials. The report documents evidence from case studies in agriculture, forestry, a...

www.lawbc.com

New report: Chemical pollution driving men’s health crisis

A new report commissioned by the Health and Environment Alliance (HEAL) warns that chemical pollution is fuelling a growing men’s health crisis in Europe. Rates of prostate and testicular cancer, as well as male infertility, continue to rise — with evidence linking these trends to exposure to harmful chemicals such as phthalates, PFAS, pesticides, and microplastics. Alarmingly, exposure even before conception is associated with disorders in sons.

www.env-health.org

Patterns and thresholds for soil pH across Europe in relation to soil health and degradation

Soil pH indicates the level of acidity or alkalinity in the soil environment, influencing various biogeochemical and physical processes. Additionally, soil pH levels are crucial ...LEBRON Inma; FEENEY Chris; REINSCH Sabine; SHOKRI Nima; AFSHAR Mehdi; et al

publications.jrc.ec.europa.eu

REGLEMENTATION

Décret n° 2025-1237 du 17 décembre 2025 révisant et complétant le tableau de maladies professionnelles n° 58 annexé au livre VII du code rural et de la pêche maritime

Publics concernés : salariés et non-salariés des professions agricoles. Objet : ce décret modifie le tableau de maladies professionnelles n° 58 relatif à la maladie de Parkinson provoquée par les pesticides, annexé au livre VII du code rural et de la pêche maritime, applicable aux salariés et non-salariés agricoles. Il porte le délai de prise en charge entre la fin de l'exposition aux pesticides et le diagnostic de la maladie, de sept à vingt ans.

Arrêté du 17 décembre 2025 établissant la liste des substances définies à l'article L. 213-10-8 du code de l'environnement relatif à la redevance pour pollutions diffuses - Légifrance

Arrêté du 17 décembre 2025 établissant la liste des substances définies à l’article L. 213-10-8 du code de l’environnement relatif à la redevance pour pollutions diffuses Numéro officiel : TECL2531307A Date de signature : 17/12/2025 Liens juridiques : Modification Arrêté 22/11/2010 NOR DEVO1026595A

New law reducing microplastic pollution enters into force

The new rules will help ensure fair competition across the Single Market and support Europe’s transition to a sustainable economy.

Règlement (UE) 2025/2455 établissant une plateforme de données commune sur les produits chimiques

Regulation (EU) 2025/2455 of the European Parliament and of the Council of 26 November 2025 establishing a common data platform on chemicals, laying down rules to ensure that the data contained in it are findable, accessible, interoperable and reusable and establishing a monitoring and outlook framework for chemicals

RAPPORT sur la garantie d’un enregistrement et d’une utilisation plus rapides des agents de lutte biologique - A10-0234/2025

RAPPORT sur la garantie d’un enregistrement et d’une utilisation plus rapides des agents de lutte biologiqueCommission de l'agriculture et du développement ruralCommission de l'environnement, de la santé publique et de la sécurité alimentaireAlexander Bernhuber, Anna Strolenberg Source : © Union européenne, 2025 - PE

RÈGLEMENT D'EXÉCUTION (UE) N° 540/2011 DE LA COMMISSION du 25 mai 2011 portant application du règlement (CE) n° 1107/2009 du Parlement européen et du Conseil, en ce qui concerne la liste des substances actives approuvées

RÈGLEMENT D'EXÉCUTION (UE) N° 540/2011 DE LA COMMISSION du 25 mai 2011 portant application du règlement (CE) n° 1107/2009 du Parlement européen et du Conseil, en ce qui concerne la liste des substances actives approuvées Numéro officiel : UE/540/2011 Date de signature : 25/05/2011 Historique : Modification par Règlement d’exécution UE/2025/2316 17/11/2025 Modification le 01/06/2026 par Règlement d’exécution UE/2025/2313 17/11/2025

AVIS / EXPERTISES / NORMES

ISO/DIS 19204 - Qualité du sol — Procédure d'évaluation des risques écologiques spécifiques au site de la contamination des sols (approche TRIADE de la qualité du sol)

ISO 19204:2017 décrit, de manière générale, l'application de l'approche TRIADE de la qualité du sol pour l'évaluation des risques écologiques spécifiques aux sites et sols contaminés. En particulier, il présente de façon transparente trois éléments de preuve (chimie, écotoxicologie et écologie) qui permettent ensemble une évaluation efficace, écologiquement robuste, mais également pratique, des risques des sols contaminés. Ce document a atteint le stade 40.00 | 2025-11-27, TC/SC: ISO/TC 190/SC 4,...

www.iso.org

Improving environmental risk assessment of pesticides: mapping crop development as function of calendar date across the EU for use in the EU regulatory framework Establishing a link between BBCH crop growth stages, calendar dates and degree-days for a set of selected crops in Europe

EU Regulation 1107/2009 requires environmental risk assessments (ERA) for non-target organisms exposed to active substances in plant protection products. To advance the ERA of pesticides effectively, it is important to consider and assess the relationship between crop development stages (BBCH), calendar dates and locations across the EU. Therefore, the present study aims to enhance pesticide risk assessment for non-target organisms by precisely mapping crop development stages (BBCH) across the EU...

www.efsa.europa.eu

DROIT ET POLITIQUE DE L'ENVIRONNEMENT

One Health Antimicrobial Resistance EU Partnership : AAP R&I

Cet appel est un appel à projets collaboratif transnational dans le cadre de l'initiative OHAMR (One Health AntiMicrobial Resistance). Il vise à soutenir des consortiums européens travaillant sur le développement de nouveaux traitements ou stratégies pour lutter contre l'antibiorésistance. Pour les partenaires français, le financement est assuré par l'Agence Nationale de la Recherche (ANR). Pour les autres nationalités, les partenaires sont financés par leur organisme national compétent, selon le...

www.eurobiomed.org

Stratégie Ecophyto 2030 : Appel à projets "Territoires de convergence eau potable et Natura 2000"

Ouvert jusqu'au 2 mars 2026, cet AAP propose de soutenir des projets visant à réduire l'impact des produits phytopharmaceutiques dans des territoires de convergence eau potable et biodiversité...

draaf.nouvelle-aquitaine.agriculture.gouv.fr

Lutte contre l'antibiorésistance : plus de 2 M€ pour financer 19 projets dans le cadre du plan Ecoantibio

A l'occasion de la Semaine mondiale de sensibilisation aux antimicrobiens, le ministère de l'Agriculture, de l'Agro-alimentaire et de la Souveraineté alimentaire publie les résultats de l'appel à projets du plan Écoantibio 3 au titre de l'année 2025.

agriculture.gouv.fr

Axe 3 - Protéger les captages pour réduire les risques pour la santé et l'environnement

Axe 3 - Protéger les captages pour réduire les risques pour la santé et l'environnement

agriculture.gouv.fr

Appel à projets Territoires de convergence eau potable et Natura 2000 : initiatives pour réduire l'impact des produits phytopharmaceutiques

L'Office français de la biodiversité, les ministères en charge de la transition écologique, de l'agriculture et de la santé lancent le premier appel à projets de la Stratégie Écophyto 2030. Cet appel à projets est doté d'une enveloppe allant jusqu'à 2,06 millions d'euros. Les projets seront soutenus pour un montant de financement maximum de 300 000 € par projet et pour une durée maximale de 36 mois. Les projets attendus doivent être multi-partenariaux et seront portés par un chef de file qui peut...

agriculture.gouv.fr

REVUE DE PRESSE

Qu'est-ce qui change au 1er janvier 2026 pour les agriculteurs ?

Tour d'horizon des nouvelles dispositions sociales, fiscales et nouveaux règlements qui s'imposent aux agriculteurs, ou tout du moins les concernent, à compter du 1er janvier 2026. Et perspectives sur les mesures attendues dans les semaines qui viennent et pourraient s'appliquer de manière rétroactive.

www.reussir.fr

La Commission européenne lâche du lest sur les autorisations de pesticides

À l'heure où des décisions juridiques mettent en défaut les processus d'évaluation des pesticides en France et en Europe, la Commission change de paradigme en proposant au nom de la compétitivité rien de moins que des autorisations à durée illimitée.

www.actu-environnement.com

Pesticides : quelles simplifications prévoit Bruxelles pour les substances actives et de réciprocité pour les produits importés ?

La Commission européenne a publié, le 16 décembre, son paquet de simplification sur les pesticides et la sécurité alimentaire. Bruxelles propose de supprimer l'exigence de réévaluation pour de nombreuses substances actives et veut renforcer la réciprocité des normes pour les importations.

www.reussir.fr

Omnibus VII sur la sécurité alimentaire (pesticides et biocides) : 90% des pesticides pourraient avoir des autorisations illimitées !

Générations Futures et PAN Europe publient ce jour un document qui analyse et alerte sur les risques graves que feraient courir pour la santé et l'environnement l'adoption de cet Omnibus

www.generations-futures.fr

Santé des sols : que va changer la nouvelle directive adoptée par l'UE pour les agriculteurs ?

La directive européenne sur la surveillance des sols, adoptée par le Conseil de l'UE puis par les eurodéputés en octobre, a été publiée le 27 novembre. Elle prévoit la mise en place de méthodologies communes et de données partagées entre États membres, afin d'atteindre l'objectif non contraignant d'un « bon état de santé des sols » d'ici à 2050. Quelles conséquences pour les agriculteurs ?

www.reussir.fr

New tool to support biocide risk assessment for bees

A new online tool called B-risk for biocides helps companies, scientists and authorities assess the risks of biocides to bees. The tool supports compliance with ECHA's 2024 Bee Guidance, which will apply from February 2026.

echa.europa.eu

EU sets new limits on seafloor litter to fight marine pollution

Litter is one of the most serious environmental issues facing the world's oceans and poses risks to human health and well-being. EU Member States agreed on new limits for litter allowed on the seafloor – an essential step towards reducing marine pollution and the first effort to set such thresholds.

environment.ec.europa.eu

Pesticides - La Commission européenne propose de supprimer leur réévaluation

Bayer-Monsanto, Syngenta, Corteva et autres multinationales de l'agrochimie doivent se frotter les mains. Dans son projet de simplification de la réglementation, Bruxelles propose de supprimer les réévaluations périodiques (qui ont lieu tous les 10 à 15 ans) des pesticides, excepté les plus dangereux.

www.quechoisir.org

Glyphosate : la Commission européenne a commis une « erreur de droit » dans sa prolongation temporaire

Bruxelles a commis une « erreur de droit » dans la prolongation temporaires d'autorisation de mise sur le marché de trois produits phytopharmaceutiques, indique le Tribunal de l'UE dans une décision publiée ce 19 novembre. Si le glyphosate est concerné, cette décision « n'aura aucune conséquence » sur sa réautorisation pour 10 ans selon PAN Europe.

www.reussir.fr

Redevance pour pollution de l'eau aux PFAS : un amendement au PLF retarde et réduit les recettes

Hier soir, l'Assemblée nationale a adopté un amendement au projet de loi de finances pour 2026 (PLF 2026) révisant le dispositif de la redevance pour pollution de l'eau introduit par la loi PFAS adoptée en février dernier. Cet amendement qui vise à rendre opérationnel le dispositif, ne permet pourtant pas d'avoir des dispositions concrètes et reste bien en deçà des enjeux.

www.generations-futures.fr

Antibiorésistance : « Il ne faut plus s’attendre à de fortes diminutions de l’exposition des animaux d’élevage aux antibiotiques »

L’exposition des animaux aux antibiotiques se stabilise en 2024, proche de l’objectif du plan Ecoantibio 3, indique le rapport annuel de l’Anses sur l’antibiorésistance publié ce 18 novembre. Des disparités sont observées pour les animaux d’élevage, avec notamment une légère augmentation pour les bovins par rapport à 2023.

www.reussir.fr

Pesticides : quand les équipements censés protéger exposent davantage

Peu adaptées aux conditions de travail réelles des agriculteurs, les équipements censées les protéger des expositions aux pesticides se révèlent bien souvent inefficaces voire même néfastes.

theconversation.com

Premier décret d’application de la “loi PFAS” : Notre Affaire à Tous et Générations Futures demandent aux Ministères d’être à la hauteur des enjeux

Le 07 novembre 2025, Notre Affaire à Tous et Générations Futures ont écrit via un recours gracieux au Ministère de la Transition écologique et au Premier Ministre afin de contester le décret d’application de la “loi PFAS”. Ce dernier doit impérativement être complété pour répondre à l’objectif qu’il se fixe et espérer une application de la loi PFAS telle que votée par le Parlement.

www.generations-futures.fr

Les cigognes et les goélands transportent des centaines de kilos de plastique depuis les décharges jusqu’aux zones humides d’Andalousie

Le plastique ne se déplace pas seulement par le vent ou la mer. En Andalousie, des milliers d’oiseaux en deviennent les livreux involontaires de déchets plastiques, reliant les décharges humaines aux zones naturelles protégées.

theconversation.com

Une stratégie innovante de biocontrôle basée sur les odeurs pour protéger les cultures sous serre

Pour réduire l’usage des pesticides, le projet HEALTHI 2 développe une méthode innovante fondée sur les odeurs afin de lutter efficacement contre le thrips, un ravageur majeur des cultures sous serre. L’objectif du projet HEALTHI 2 est de transférer aux producteurs une stratégie de biocontrôle « Push-Pull » utilisant des odeurs, dites aussi médiateurs chimiques, […]

wikiagri.fr

[hal-05345232] Stage-specific effects of a fungicide and global warming on copper accumulation and development in a major vineyard insect pest

The use of copper-based fungicides in agroecosystems has resulted in copper accumulation in soils, increasing its uptake by plants and its transfer along the trophic chain. While fungicides are effective to control fungal diseases, they can also impact non-target organisms such as insect pests that feed on copper-contaminated vegetation. This copper exposure can impair developmental and reproductive processes. In addition, global warming alters the functioning of agroecosystems through rising tem…

hal.science

Loi Duplomb : le poisson zèbre est un outil d’alerte précoce

Share article Print article Pour évaluer la toxicité de pesticides, tels que l’acétamipride, rendu célèbre par la loi Duplomb, des chercheurs étudient leurs effets sur des invertébrés, à commencer par des insectes pollinisateurs comme l’abeille. Mais concernant leurs impacts sur la santé des humains et des autres vertébrés, qui restent mal pris en compte, le poisson zèbre est un modèle animal pertinent qui permet, notamment, de développer des tests de toxicité plus éthiques.

theconversation.com

Un rapport sur les produits phytosanitaires fait débat

La partie liée aux produits phytosanitaire agricoles d'un rapport sur les politiques pour protéger la santé publique fait débat : des membres du comité scientifique ont dénoncé une « minimisation des risques » et Le Monde révèle des interventions du ministère de l'Agriculture.

www.terre-net.fr