

# Stop Endocrine Disruptors!

Recommendations for effectively reducing  
exposure to endocrine disruptive pesticides & biocides



**Beginning in June 2018, chemical substances with properties that are damaging to the human and animal hormone system will be regulated for the first time on the basis of defined scientific criteria and evaluation methods. These EU regulations will be implemented in June for biocide products, about five years later than originally planned. Similar regulations for pesticides will follow in November. PAN Germany considers these regulatory measures to be a step in the right direction. However, they are inadequate to ensure an appreciable reduction of exposure of humans and the environment to so-called endocrine disruptors in the foreseeable future. There is an urgent need for more action to realize this goal set by the European Union (EU).**

Endocrine disruptors (EDs, also called endocrine disruptor chemicals, EDCs) are exogenous substances that can interfere with the hormone system in humans and animals in ways similar to the body's own hormones and disrupt the hormonal system. As a consequence, they can trigger or intensify developmental malfunctions or other negative health effects. Some of the effects that have been identified as possibly linked to exposure to EDs are reproductive disorders; malformations of sex organs; hormone-related cancers such as cancer of the breast, prostate, or testicles; behavioural and developmental disorders; and metabolic diseases such as diabetes. Especially during sensitive phases of prenatal development or during puberty, these hazardous chemicals can be responsible for severe damage that may even affect more than one generation.



*More action is urgently needed to ensure a nontoxic environment.*

*The identification of EDs is expected to take years, remain incomplete, and lead to bans for only very few substances.*

required to demonstrate hormone disruption will be in fact impossible to supply or only at some point far in the future, so that they in effect run counter to the precautionary principle. Furthermore no provisions are spelled out for dealing with suspected endocrine disruptors if available data does not allow for an unequivocal classification as an ED substance and no measures are proposed for systematically improving evaluation procedures and the guidance document.<sup>17</sup>

### **The example of biocides**

The Members Competent Authorities agreed on concrete procedures for regulating biocides and biocidal products with endocrine disruptive properties in March 2018.<sup>18</sup> In Germany alone, these procedures are relevant for about forty thousand biocide products currently on the market, some 260 active substances, and a huge number of so-called biocide-treated articles, e.g. wool carpets treated with permethrin. One positive aspect is the fact that not only the active substances but also any co-formulants used in biocidal products must be evaluated for ED properties. However, there are also numerous limits and exceptions included in the regulations. For example, endocrine disruptive biocides can be exempted from the exclusion process if their hormonal mode of action intentionally target invertebrate pests; the same is the case if these biocides have an adverse endocrine effect on non-target organisms in the environment. Here, environmental protection standards are being weakened in comparison to the provisions in pesticide legislation without any justification. Moreover, many suspected ED biocides are, at least for the time being, not being evaluated because their approval process began before the current biocide regulation entered into force on 1 September 2013. This group includes approximately 200 combinations of active substance and product types.<sup>19</sup> In Germany alone, about 180 rodenticides with the suspected ED substance difenacoum have been approved. About 500 approved wood preservatives contain propiconazole, frequently in combination with cypermethrin. Other wood preservatives contain mixtures of agents suspected of being EDs such as thiacloprid, boric acid, borax, tebuconazole, or dazomet.<sup>20</sup> It may take years until all of these substances have been evaluated. And even if they are then classified as EDs, numerous derogations might allow sales of these products in the EU to professional users.



### **To sum up**

In view of these prerequisites, it is likely that only a few biocides and pesticides will be taken off the market in future due to their ED properties. There is to date no uniform, horizontal concept for dealing with endocrine disruptors within various spheres of EU policymaking. Besides regulating substances, more far-reaching strategies are needed to foster the sustainable and environmentally sound production and use of goods and foodstuffs. It is time for German policymakers to take action to meet the threat of EDs head-on with innovative measures.

### **PAN Germany calls on the German Federal Government to take the follow steps**

- ▶ Initiate a “National Strategy to Minimise Exposure to Endocrine Disruptors” with concrete goals, and a timetable as well as the allocation of funds for research on EDs, for promoting alternatives, and for informing the public, in particular about how vulnerable groups such as children and pregnant women can be protected.
- ▶ Ensure committed participation in developing a new, fully-fledged strategy for the EU on endocrine disruptors and in drafting the strategy of the European Union for a non-toxic environment (as part of the seventh EAP).
- ▶ Include endocrine disruptors as a focus of work within the German interministerial Action Programme on the Environ-

