From Integrated Pest Control to Holistic Risk Reduction Sustainable Management of Nuisance, Pests, Disease Carriers and Vectors

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Human understanding of pests and disease through history underwent several major changes. A biblical reference list to plague was given in The Book of Job. May beetle control remained priest responsibility until the 19th century. On the other side, the 1347 European plague was already recognized as a vector borne disease. Entomology in the US was pushed by Xenophobia and supported by German immigrants. Overseas activities of US, GB and others provided comprehensive Public Health experience. The focus in Germany – except GDR – moved to agrochemicals, which were considered more profitable for the industry.

Based upon Global 2000 and the need for resistance prophylaxis, Medical Entomology in Germany started at the US-Army Europe in the 1980's under the umbrella of Preventive Medicine, followed by multi-chemical sensitivity management and holistic risk reduction. Greatly improved pest management and a drastic pesticide use reduction were the main results. As a consequence, Pest Biology (SchaedlingsBiologie) evolved as Preventive Medicine for the human environment.

The focus is the immediate human environment including indoor and recreation areas.

Major issues are to achieve and to maintain pest absence; risk reduction consistency, including economy and ecology; holistic approach for complex systems; considering all aspects of influence; aim properly prior to action: leave more, do less; the wise use of synergies,

Many improvements to reduce risks can be implemented without delay, e.g. tick bite reduction as an interim target before complete knowledge is acquired.

Quality assurance for pest control needs attention. An incentive system for less effort / more efficiency should be introduced.

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