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Nota di contenuto	Morphine – the Gift of Morpheus -- Cocaine – from Drug to Local Anesthetic -- Aspirin – the Most Used Medicine in Human History -- Steroids and the Pill -- Caffeine and Viagra -- Quinine -- Coumarins – from Rat Poison to Medicine for the President -- Natural Products as Starting Materials for Drug Synthesis -- Modern Drug Research -- Are Drugs Only Bad? -- Healing Poisons.
Sommario/riassunto	Natural products are marvels of evolution. Plants are chemical factories that have produced a wide range of highly diverse and fascinating natural substances with extraordinary properties that humans have

used for centuries to treat and cure diseases. Since the discovery of penicillin, natural products have become an important source of medicine. However, only a small fraction of the presumably many millions are known, with the rest still waiting to be discovered. Natural products include important antibiotics, immunosuppressants, anti-cancer agents, hormones, and antiviral agents. But do natural products still have value in the age of biotechnology and genetic engineering? Yes, more than ever, because medicinal chemists draw creative inspiration from nature to develop the next medical breakthrough. Oliver Kayser tells the story of natural products and medicinal plants in this book in a highly informative and amusing way from a new perspective. He explores how natural products from naturopathy gave birth to the pharmaceutical industry, how they shaped our society as medicines and remedies, enabled wars, and paved the way to Nobel Prizes. The author provides a fascinating overview of natural product chemistry in plants, microorganisms, and animals. The author provides a fascinating overview of natural product chemistry in plants, microorganisms, and animals. Starting with the first isolations at the beginning of the Industrial Revolution, he takes us through the ideas and enthusiasm of many scientists to the modern era of drug testing, computer chemistry, and highly successful serendipitous discoveries of active ingredients. Natural product research in the laboratory has a significant impact on our lives today. The author offers a behind-the-scenes look at how the search for tomorrow's drugs is currently conducted. This is the ultimate book from the pen of a scientist deeply immersed in research, providing the reader with an enlightening and entertaining glimpse into how scientists think and how difficult research can be. About the Author Oliver Kayser is a pharmacist, internationally recognized professor, and natural product researcher at TU Dortmund. He is the author of numerous scientific papers and textbooks. His main interest is in medicinal plants and natural products that have influenced the development of modern drugs. His research focuses on the biosynthesis of medically significant natural products in plants, which are currently used as lead structures for new active ingredients in cancer medicine, neurological diseases, and antibiotics. The translation was done with the help of artificial intelligence. A subsequent human revision was done primarily in terms of content. This book is a translation of an original German edition. The translation was done with the help of artificial intelligence (machine translation by the service DeepL.com). A subsequent human revision was done primarily in terms of content, so that the book will read stylistically differently from a conventional translation.
