## Biologia Blu Plus Le Basi Molecolari Della Vita E Dellevoluzione Con Interactive E Book Con Espansione Online Per Le Scuole Superiori

The Cambridge IGCSE® Combined and Co-ordinated Sciences series is tailored to the 0653 and 0654 syllabuses for first examination in 2019, and all components of the series are endorsed by Cambridge International Examinations. This Biology Workbook is tailored to the Cambridge IGCSE® Combined Science 0653 and Co-ordinated Sciences 0654 syllabuses for first examination in 2019 and is endorsed for learner support by Cambridge International Examinations. Covering both the Core and the Supplement material, this workbook contains exercises arranged in the same order as the coursebook and are clearly marked according to the syllabus they cover. Developing students' scientific skills, these exercises are complemented by self-assessment checklists to help them evaluate their work as they go. Answers are provided at the back of the book.

Health management system per la gestione di lesioni cutanee da decubitoFrancoAngeli

"Although it has been mooted whether the dramatic technological advances in neurological practice, (i.e., neuroimaging) might render the physical exam redundant, others maintain the central importance of neurological examination in patient management. A Dictionary of Neurological Signs seeks to elucidate the interpretation of neurological signs ("neurosemiology"): their anatomical, physiological, and pathological significance." (from the Preface) The structured entries in this practical, clinical resource provide a snapshot of a wide range of neurological signs. Each entry includes: definition of the sign; brief account of the clinical technique required to elicit the sign; description of the other signs which may accompany the index sign. Where known, the entries also include neuroanatomical basis of the sign; explanation of pathyophysiological and/or pharmacological background; neuropathological basis; differential diagnosis; and brief treatment details. The Dictionary provides practical, concise answers to complex clinical questions.

This book details the effects of climate variability on small pelagic fish and their ecosystems and fisheries. Particularly abundant in coastal upwelling regions off the west coasts of the Americas and Africa, off Japan, and in the NE Atlantic, the stocks of these fish fluctuate greatly over the timescale of decades, with large ecological and economic effects. This book describes the nature and cause of these fluctuations, and their consequences. It outlines results from paleo-oceanographic studies, showing that similar fluctuations have also occurred over the past two millennia. The potential effects of future climate change, both natural and anthropogenic, on stocks and fisheries, are considered. The book concludes by recommending the continued international study and assessment of small pelagic fish in order to best inform management and policy under a changing climate. It is written for research scientists, academics, and policy makers in fisheries, oceanography, and climate change.

This publication is the result of a course on identification of Hymenoptera given three times since 1985 at the Centre for Land and Biological Resources Research. The considerable interest in these courses indicated the need for a comprehensive identification guide to all extant families of Hymenoptera. The main emphasis is on family identification using the keys, which are complemented by family sketches. The sketches include a taxonomic diagnosis to supplement the keys, a summary of the biology, the size and distribution, and important literature references. In many fisheries they are, however, often landed and marketed.

As an intricate association between a fungus and one or more green algae or cyanobacteria, lichens are one of the most successful examples of symbiosis. These fascinating organisms survive extreme desiccation and temperatures. They are adapted to a great variety of habitats, from deserts to intertidal zones, from tropical rain forests to the peaks of the Himalayas and to circumpolar ecosystems. Lichens are extremely efficient accumulators of atmospherically deposited pollutants, and are therefore widely used to monitor environmental pollution. Their wide range of secondary products show pharmaceutically interesting fungicidal, antibacterial and antiviral properties. Lichens are extremely difficult to culture. This manual provides well-tested tissue culture protocols, protocols for studying lichen ultrastructure, (eco)physiology, primary and secondary compounds, and for using lichens as bioindicators. This volume celebrates the contributions of Dr. Eugene Gaffney to the study of turtles, through a diverse and complementary collection of papers that showcases the latest research on one of the most intriguing groups of reptiles. A mix of focused and review papers deals with numerous aspects of the evolutionary history of turtles, including embryonic development, origins, early diversification, phylogenetic relationships, and biogeography. Moreover it includes reports on important but poorly understood fossil turtle assemblages, provides historical perspectives on turtle research, and documents disease and variation in turtles. With its broad scope, which includes descriptions of turtles. "This volume's breadth of time, geography, and taxonomic coverage makes it a major contribution to the field and a 'must have' for all vertebrate paleontologists.", James F. Parham, California State University, CA, USA "A comprehensive and sweeping overview of turtle evolution by the top experts in the field that will interest everyone curious about these noble creatures." And. C. Burke, Wesleyan University, CT, USA "A truly compr

The protection of agricultural crops, forest, and man and his domestic animals from annoyance and damage by various kinds of pests remains a chronic problem. As we endeavor to improve pro duction processes and to develop more effective and acceptable tactics for achieving this protection, we must give high priority to all potentially useful techniques for the control and management of insects. Pest control is recognized as an acceptable and necessary part of modern agriculture. Methods employed vary greatly and tend to reflect compromises involving 3 determining factors: technological capability, economic feasibility, and social acceptability. How ever, these factors are also subject to change with time since each involves value judgments that are based on available information, cost, benefit considerations, the seriousness of the pest problem, and the political climate. Whatever method is chosen, energy resources continue to dwindle under the impact of increasing population, and it is inevitable that greater reliance must be placed upon renewable resources in pest management. One alternative is the use of a pest

management method that uses the energy of the pest's own biomass to fuel a self-perpetuating control system. The use of biological control agents for the control of pests has long been an integral part of the pest management strategy in crop production and forestry and in the protection of man and animals. The importance and unique advantages of the method are well recognized; numerous treatises deal with accomplishments and methodologies.

Already as a young boy, I used to walk with my late father, an ardent naturalist at heart, though to his regret not by profession, in the fields and woods on Mt. Carmel where we lived. My father, being largely an amateur ornithologist but also loving other vertebrates, was less inter ested in the little creatures(-the invertebrates) so abundant under stones. These were, more often then not, isopods which are particularly abundant in the Mediterranean region of northern Israel, and therefore not difficult to encounter (Fig. 1). Thus, my interest in the terrestrial isopods started at an early stage. Many years later, after graduating from the Hebrew University, Jerusalem, I worked as an assistant to my late friend and colleague, Professor Michael Costa, at the Teachers Seminary in Oranim. One day I found on my desk a copy of Edney's (1954) paper: Woodlice and the land habitat, which my friend left for me knowing of my interest in this group. Therefore, due to the stimulus of Edney's paper, and the many interesting questions it raised in my mind, I developed a lifelong interest in this amazing crustacean group. My research in the ecophysiology of this group followed to a large extent the directions formulated by Edney and Cloudsley-Thompson whose name will be mentioned throughout this book. I am also indebted to the many stimulating discussions with my friends and colleagues C. S. Crawford, K. E. Linsenmair, and E.

The conference "Combating Desertification with Plants" was held in Beer Sheva, Israel, from November 2-5, 1999, and was attended by 70 participants from 30 countries and/or international organisations. Desertification - the degradation of soils in drylands - is a phenomenon occurring in scores of countries around the globe. The number of people (in semiarid regions) affected by the steady decline in the productivity of their lands is in the hundred millions. The measures required to halt and reverse the process of desertification fall into many categories - policy, institutional, sociological-anthropological, and technical. Although technical "solutions" are not currently in vogue, the conference organizers felt that perhaps the pendulum had swung too far in the direction of "participatory approaches." Hence IPALAC - The International Program for Arid Land Crops - whose function is to serve as a catalyst for optimizing the contribution of plant germplasm to sustainable development in desertification-prone regions - felt the time was opportune for providing a platform for projects where the "plant-driven" approach to development finds expression. Some 45 papers were delivered at the conference, falling into the categories of this volume: Overview, Potential Germplasm for Arid Lands, Introduction, Domestication and Dissemination of Arid Land Plants, Land Rehabilitation, and Mechanisms of Plant Transfer. The conference was funded by UNESCO (Division of Ecological Sciences), the Ministry of Foreign Affairs of Finland, and MASHAV, Israel's Center for International Development Cooperation.

In the last few decades more and more yeast habitats have been explored, spanning cold climates to tropical regions and dry deserts to rainforests. As a result, a large body of ecological data has been accumulated and the number of known yeast species has increased rapidly. This book provides an overview of the biodiversity of yeasts in different habitats. Recent advances achieved by the application of molecular biological methods in the field of yeast taxonomy and ecology are also incorporated in the book. Wherever possible, the interaction between yeasts and the surrounding environment is discussed.

Important Bird Areas and Important Plant Areas have already been identified in more than 170 countries. The Key Biodiversity Areas approach builds on the work done to date, in order to provide practical guidance to governments in identifying those sites which must be protected to ensure the future of both biodiversity and humanity. The life sciences deal with a vast array of problems at different spatial, temporal, and organizational scales. The mathematics necessary to describe, model, and analyze these problems is similarly diverse, incorporating quantitative techniques that are rarely taught in standard undergraduate courses. This textbook provides an accessible introduction to these critical mathematical concepts, linking them to biological observation and theory while also presenting the computational tools needed to address problems not readily investigated using mathematics alone. Proven in the classroom and requiring only a background in high school math, Mathematics for the Life Sciences doesn't just focus on calculus as do most other textbooks on the subject. It covers deterministic methods and those that incorporate uncertainty, problems in discrete and continuous time, probability, graphing and data analysis, matrix modeling, difference equations, differential equations, and much more. The book uses MATLAB throughout, explaining how to use it, write code, and connect models to data in examples chosen from across the life sciences. Provides undergraduate life science students with a succinct overview of major mathematical concepts that are essential for modern biology Covers all the major quantitative corporating examples of an entry-level course for life science students Provides good background for the MCAT, which now includes data based and statistical reasoning Explicitly links data and math modeling Includes end-of-chapter homework problems, end-of-unit student projects, and select answers to homework problems Uses MATLAB throughout, and MATLAB m-files with an R supplement are available online P

This book provides an update on the phylogeny, systematics and ecology of horses in South America based on data provided over the past three decades. The contemporary South America mammalian communities were shaped by the emergence of the Isthmus of Panama and by the profound climatic oscillations during the Pleistocene. Horses were a conspicuous group of immigrant mammals from North America that arrived in South America during the Pleistocene. This group is represented by 2 genera, Hippidion and Equus, which include small species (Hippidion devillei, H. saldiasi, E. andium and E. insulatus) and large forms (Equus neogeus and H. principale). Both groups arrived in South America via 2 different routes. One model designed to explain this migration indicates that the small forms used the Andes corridor, while larger horses used the eastern route and arrived through some coastal areas. Molecular dating (ancient DNA) suggests that the South American horses separated from the North American taxa (caballines and the New World stilt-legged horse) after 3.6 - 3.2 Ma, consistent with the final formation of the Panamanian Isthmus. Recent studies of stable isotopes in these horses indicate an extensive range of ?13C values cover closed woodlands to C4 grasslands. This plasticity agrees with the hypothesis that generalist species and open biome specialist species from North America indicate a positive migration through South America. This volume is devoted to new developments in a huge range of topics, such as the mechanisms of hormonal carcinogenesis, epidemiology and risk factors, hormone production by tumor

tissue and antihormonal therapy of cancer and its prevention.

This monograph contents a review of the beetle family Trogossitidae (Cleroidea). The worldwide distributed family includes 55 recent and 10 extinct genera with about 600 species that are classified within 3 subfamilies and 12 tribes. In spite of fewer number of species, Trogossitidae is morphologically and ecologically extremely diversified. There are four-eyed predators that fly, run and even jump around swiftly in forest clearings to contrast with slow-moving, fungivorous species that dwell under the bark of old trees. There are also species that squat on flowers to feed on pollen grains as well as minute creatures that have been extracted from forest litter. Brief descriptions of all genera as well as keys to all higher taxa are provided. All known species and subspecies are listed, together with complete taxonomic references back to 1910, the date of issue of their last catalogue. The work includes maps of distribution of all genera, colour photographs of generic representatives, SEM photographs and remarks on a phylogeny of particular taxa.

The classic book on a major modern theory

Basic Principles of Wastewater Treatment is the second volume in the Biological Wastewater Treatment series, and focus on the unit operations and processes associated with biological wastewater treatment. The major topics covered are: microbiology and ecology of wastewater treatment reaction kinetics and reactor hydraulics .conversion of organic and inorganic matter .sedimentation .aeration. The theory presented in this volume forms the basis upon which the other books in the series are built. The Biological Wastewater Treatment series is based on the book Biological Wastewater Treatment in Warm Climate Regions and on a highly acclaimed set of best selling textbooks. This international version is comprised by six textbooks giving a state-of-the-art presentation of the science and technology of biological wastewater treatment. Other books in the Biological Wastewater Treatment series: Volume 1: Wastewater characteristics, treatment and disposal Volume 3: Waste stabilisation ponds Volume 4: Anaerobic reactors Volume 5: Activated sludge and aerobic biofilm reactors Volume 6: Sludge treatment and disposal The second edition of The Diversity of Fishes represents a major revision of the world's most widely adopted ichthyology textbook. Expanded and updated, the second edition is illustrated throughout with striking color photographs depicting the spectacular evolutionary adaptations of the most ecologically and taxonomically diverse vertebrate group. The text incorporates the latest advances in the biology of fishes, covering taxonomy, anatomy, physiology, biogeography, ecology, and behavior. A new chapter on genetics and molecular ecology of fishes has been added, and conservation is emphasized throughout. Hundreds of new and redrawn illustrations augment readable text, and every chapter has been revised to reflect the discoveries and greater understanding achieved during the past decade. Written by a team of internationally-recognized authorities, the first edition of The Diversity of Fishes was received with enthu

Waste Stabilisation Ponds is the third volume in the Biological Wastewater Treatment series. The major variants of pond systems are fully covered, namely .facultative ponds .anaerobic ponds .aerated lagoons .maturation ponds. The book presents in a clear and didactic way the main concepts, working principles, expected removal efficiencies, design criteria, design examples, construction aspects, operational guidelines and sludge management for pond systems. The Biological Wastewater Treatment series is based on the book Biological Wastewater Treatment in Warm Climate Regions and on a highly acclaimed set of best selling textbooks. This international version is comprised by six textbooks giving a state-of-the-art presentation of the science and technology of biological wastewater treatment. Other books in the Biological Wastewater Treatment series: Volume 1: Wastewater characteristics, treatment and disposal Volume 2: Basic principles of wastewater treatment Volume 4: Anaerobic reactors Volume 5: Activated sludge and aerobic biofilm reactors Volume 6: Sludge treatment and disposal Originally published in the transactions of the American Philosophical Socieity in 1933, this volume has had a lasting significance in ichthyology literature. It has a collection of drawings of teleost skulls, and reviews the field of ichthyology as a whole, with special reference to the problems of evolution.

"The aim of this report is to define and review this "semi-aquaculture practice", which has been more accurately named "capture-based aquaculture." -- Preface. Advances in Genetics Research presents original research results on the leading edge of genetics discovery. Each article has been carefully selected in an attempt to present substantial research results across a broad spectrum. In this continuing series compilation, the authors present and discuss varied topical data such as cytogenic mapping of animal genomes; somatic cell counts in cow's milk and implications for dairy cow breeding; mutations and the carcinogenic process; and, genetic mapping projects and functional genomics.

1984 is George Orwell's terrifying vision of a totalitarian future in which everything and everyone is slave to a tyrannical regime lead by The Party. Winston Smith works for the Ministry of Truth in London, chief city of Airstrip One. Big Brother stares out from every poster, the Thought Police uncover every act of betrayal. When Winston finds love with Julia, he discovers that life does not have to be dull and deadening, and awakens to new possibilities. Despite the police helicopters that hover and circle overhead, Winston and Julia begin to question the Party; they are drawn towards conspiracy. Yet Big Brother will not tolerate dissent - even in the mind. For those with original thoughts they invented Room 101...

Designed to complement Robbins and Cotran Pathologic Basis of Disease, 9th Edition and Robbins Basic Pathology, 9th Edition, the full-color Robbins and Cotran Atlas of Pathology offers more than 1,500 outstanding illustrations that vividly depict the most common diseases covered in pathology courses and USMLE exams. It's a quick visual reference or review for students and professionals alike. Quickly compare gross, microscopic, and radiologic images with examples of normal organs and tissues. Review just the

key information you need to know with help from extensive legends that provide convenient summarizations. Understand the correlation between pathology and clinical history, physical exam findings, and clinical laboratory tests. Visualize key pathologic findings with crystal clarity through over 400 new or updated images. Study effectively with this unique companion product! All chapters have been reviewed and revised to reflect the new content found in Robbins and Cotran Pathologic Basis of Disease, 9th Edition (ISBN: 978-1-4557-2613-4).

This edition of our successful series to support the Cambridge IGCSE Biology syllabus (0610) is fully updated for the revised syllabus for first examination from 2016. Written by an experienced teacher and examiner, Cambridge IGCSE Biology Coursebook with CD-ROM gives comprehensive and accessible coverage of the syllabus content. Suggestions for practical activities are included, designed to help develop the required experimental skills, with full guidance included on the CD-ROM. Study tips throughout the text, examstyle questions at the end of each chapter and a host of revision and practice material on the CD-ROM are designed to help students prepare for their examinations. Answers to the exam-style questions in the Coursebook are provided on the CD-ROM.

This book is an introduction to the world of aroma chemicals, essential oils, fragrances and flavour compositions for the food, cosmetics and pharmaceutical industry. Present technology, the future use of resources and biotechnological approaches for the production of the respective chemical compounds are described. The book has an integrated and interdisciplinary approach on future industrial production and the issues related to this topic.

This Special Issue features recent data concerning thioredoxins and glutaredoxins from various biological systems, including bacteria, mammals, and plants. Four of the sixteen articles are review papers that deal with the regulation of development of the effect of hydrogen peroxide and the interactions between oxidants and reductants, the description of methionine sulfoxide reductases, detoxification enzymes that require thioredoxin or glutaredoxin, and the response of plants to cold stress, respectively. This is followed by eleven research articles that focus on a reductant of thioredoxin in bacteria, a thioredoxin reductase, and a variety of plant and bacterial thioredoxins, including the m, f, o, and h isoforms and their targets. Various parameters are studied, including genetic, structural, and physiological properties of these systems. The redox regulation of monodehydroascorbate reductase, aminolevulinic acid dehydratase, and cytosolic isocitrate dehydrogenase could have very important consequences in plant metabolism. Also, the properties of the mitochondrial o-type thioredoxins and their unexpected capacity to bind iron–sulfur center (ISC) structures open new developments concerning the redox mitochondrial function and possibly ISC assembly in mitochondria. The final paper discusses interesting biotechnological applications of thioredoxin for breadmaking. 1. Paleobiology of the Precambrian: The Age of Blue-Green Algae.- Morphology and Classification of Cyanophytes.- Assessment of the Cyanophytic Fossil Record.- Quantity of Fossil Evidence.- Quality and Geological Distribution of Fossil Evidence.- Conclusions.- Origin of Blue-Green Algae.- Mode of Origin.- Paleobiological Evidence.- Phylogeny of the Cyanophyta.- Summary.- References.- 2. Five-Kingdom Classification and the Origin and Evolution of Cells.- Plants and Animals: Botanists a.

Green technologies are no longer the "future" of science, but the present. With more and more mature industries, such as the process industries, making large strides seemingly every single day, and more consumers demanding products created from green technologies, it is essential for any business in any industry to be familiar with the latest processes and technologies. It is all part of a global effort to "go greener," and this is nowhere more apparent than in fermentation technology. This book describes relevant aspects of industrial-scale fermentation, an expanding area of activity, which already generates commercial values of over one third of a trillion US dollars annually, and which will most likely radically change the way we produce chemicals in the long-term future. From biofuels and bulk amino acids to monoclonal antibodies and stem cells, they all rely on mass suspension cultivation of cells in stirred bioreactors, which is the most widely used and versatile way to produce. Today, a wide array of cells can be cultivated in this way, and for most of them genetic engineering tools are also available. Examples of products, operating procedures, engineering and design aspects, economic drivers and cost, and regulatory issues are addressed. In addition, there will be a discussion of how we got to where we are today, and of the real world in industrial fermentation. This chapter is exclusively dedicated to large-scale production used in industrial settings.

"Following on the successes of two previous dictionary projects, the CRC World Dictionary of Plant Names and the CRC World Dictionary of the Grasses, Umberto Quattrocchi has undertaken this dictionary of economically important plants.... He has done for these plants what was so admirably done in his other works—brought the vast and scattered literature on plant names, and in this case, too, their uses, into coherent order so that the inquisitive scholar can get a foothold." —From the Foreword, Donald H. Pfister, Harvard University Herbaria, Cambridge, Massachusetts The CRC World Dictionary of Medicinal and Poisonous Plants: Common Names, Scientific Names, Eponyms, Synonyms, and Etymology provides the starting point for better access to data on plants used around the world in medicine, food, and cultural practices. The material found in the five volumes has been painstakingly gathered from papers of general interest, reports and records, taxonomic revisions, field studies, herbaria and herbarium collections, notes, monographs, pamphlets, botanical literature, and literature tout court. It includes sources available at various natural history libraries, floras and standard flora works, local floras and local histories, nomenclatural histories, and the International Code of Botanical Nomenclature. Much more than a dictionary, the book provides the names of thousands of genera and species of economically important plants, concise summaries of plant properties, and appropriate observations about medicinal uses. Drawing from a tremendous range of primary and secondary sources, it is an indispensable time-saving guide for all those involved with botany, herbal medicine, pharmacognosy, toxicology, medicinal and natural product chemistry, and agriculture. This is the first comprehensive book focusing on the form and function of insect mouthparts. Written by leading experts, it reviews the current knowledge on feeding types and the evolution of mouthparts and presents new research approaches. The richly illustrated artic

first controlled nuclear chain reaction in Chicago in 1942, his student, collaborator, fellow Nobel Prize winner and lifelong friend Emilio Segrè presents the scientist, and explains in nontechnical terms Fermi's work and his achievements. "Segre's description of Fermi's early life and his involvement with and commitment to physics is extremely interesting... Segre's description of Fermi's early life and his involvement with and commitment to physics is extremely interesting... outstanding characteristics of Fermi's theoretical work: clarity and completeness... Segrè has succeeded admirably in describing Fermi's entire scientific career, and this book is strongly recommended." — M. L. Goldberger, Science "We must thank Emilio Segrè for this authoritative, revealing and inspiring book. It covers in a masterly fashion the most exciting thirty years of modern physics and the character and activities of one of its greatest contributors." — Nature "A rich, well-rounded portrait of [Fermi] the scientist, his methods, intellectual history, and achievements. Explaining in nontechnical terms the scientific problems Fermi faced or solved, Enrico Fermi, Physicist contains illuminating material concerning Fermi's youth in Italy and the development of his scientific style." — Physics Today "All that might be hoped for in a biography of one Nobel Prize winner in physics by another has been realized in Emilio Segrè's biography of his friend, Enrico Fermi... A truly masterly drawing of Fermi's character, along with his physics and the events through which he moved, Segrè has provided us with a brilliant appreciation of one of the most pre-eminent figures of modern physics." — Physics Bulletin "This excellent biography, written by one of the original group who worked with him during the 1930s at Rome, catches beautifully the style and spirit of its subject... With Fermi's passing the age of the universal experimental and theoretical physicist is gone. Segre's book tells the story of this heroic age of physics and of its principal actor; it is a delight to read, and I recommend it heartily." — American Scientist "Here we meet the man at work and we see the meticulous scientist... This book also shows us another facet of Fermi: that of the conscientious scientist torn between his love of pure research and his love of teaching." — V. Barocas, Annals of Science "Segrè is a sensitive biographer, responsive to all problems that can plague the creative scientist; he shows, above all, Fermi's dedication, zeal, and extraordinary talents. Segre has provided more than sympathy. Much that is new about Fermi's youth in Italy appears here... [A] very rewarding book... Every physicist will want to read this biography, along with every reader who has an interest in intellectual developments during the 1920-1960 era." — J. Z. Fullmer, The Ohio Journal of Science

Based on previously unexplored archival documentation, this book offers the first general overview of the history of Italian eugenics, not limited to the decades of Fascist regime, but instead ranging from the beginning of the 1900s to the first half of the 1970s. The Author discusses several fundamental themes of the comparative history of eugenics: the importance of the Latin eugenic model; the relationship between eugenics and fascism; the influence of Catholicism on the eugenic discourse and the complex links between genetics and eugenics. It examines the Liberal pre-fascist period and the post-WW2 transition from fascist and racial eugenics to medical and human genetics. As far as fascist eugenics is concerned, the book provides a refreshing analysis, considering Italian eugenics as the most important case-study in order to define Latin eugenics as an alternative model to its Anglo-American, German and Scandinavian counterparts. Analyses in detail the nature-nurture debate during the State racist campaign in fascist Italy (1938–1943) as a boundary tool in the contraposition between the different institutional, political and ideological currents of fascist racism. Copyright: 1e3d44447b6dc8860a78ee7d8b9e1833