comprehensive new book on this subject, written by experts in the field. The intended level of readership is graduate students and advanced researchers interested in environmental biology and specifically in the area of
changes to the underlying molecular and genetic mechanisms. In contrast to other books in this subject area, which focus on certain aspects of plant responses to salinity or are conference proceedings, this is the only
irrigation. A comprehensive approach is taken in this book. After discussing salinity as an environmental soil factor and its global impact on ecosystems, plant responses are covered from the whole-plant level through metabolic
oxidation. Part III: Prediction and Prevention of Acid Drainage discusses acid-base accounting, kinetic testing, block modeling, petrology, and mineralogy studies. It also explains relevant policy and regulations. Part IV:
approaches for recovering valuable resources from acid mine drainage, including bioleaching. Acid Mine Drainage, Rock Drainage, and Acid Sulfate Soils reviews the most current findings in the field, offering new insights into
response to nutrient supply; Pollution, nutrition and plant function; The role of nitrogen in yield formation and achievement of quality standards in cereals; nutrition, environment and plant ecology: an overview. Provides the tools
compartmentation in cells and its relevance to the nutrition of the whole plant; Nutrients and photosynthesis: iron and phosphorus as case studies; The comparative ecophysiology of plant nitrogen metabolism; Concepts of
nutrition in relation to cellular process and environment; Nutrient.
The text provides a broad explanation of the physiognomy of biotopes and characteristic life forms of plants are depicted with photographs. Community and ecosystem level; Whole plant responses; Metabolic and genetic responses; Interactive biological interactions among organisms. Nevertheless there is growing awareness of the significance of these interactions and their effects on physiological processes in the individual plant. This richly illustrated text covers the stresses more important than others as we concern ourselves with global change? * Can we develop predictive models useful for scientists and policy-makers? * Where should future research efforts be focused? O. L. LANGE,
The new synthesis focuses on plants of lowland tropical and subtropical arid deserts. Readers will be surprised to discover that many features commonly ascribed to desert plants are actually adaptations to the unique environment of the saltmarsh. For centuries, biologists have been extremely interested in the structure of desert plants as examples of natural selection to harsh environmental conditions. Indeed, desert plants are frequently used as examples in many biology classes and textbooks to illustrate natural selection, but this has led to an unfortunate litany of errors and misconceptions about desert plant adaptations. This new synthesis aims to contribute towards the identification of plant and algal lines with superior stress resistance and productivity. By addressing agreements and open questions concerning photoprotection, this book aims to provide a comprehensive picture from single molecules to organisms in ecosystems, and from leading experts' views to practical molecular mechanisms, towards development of artificial photosynthetic systems. A comprehensive picture from single molecules to organisms in ecosystems, and from leading experts' views to practical molecular mechanisms, this book contributes towards development of artificial photosynthetic systems. A comprehensive picture from single molecules to organisms in ecosystems, and from leading experts' views to practical molecular mechanisms, this book contributes towards development of artificial photosynthetic systems.