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**Work, Stress and Health**

**Advances in Scientific Meditation and Stress Coping**  
 Department of Science and Nursing



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## **Stress: Effect on Plants and Animals**

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### **Abstract**

Abiotic stress is defined as the negative impact of non-living factors on the living organisms in a specific environment. The non-living variable must influence the environment beyond normal range of variation to adversely affect the population performance or individual physiology of the organism in a significant way. Whereas a biotic stress would include living disturbances as fungi or harmful insects, abiotic stress factors, or stressors, are non-living, often intangible, factors such as intense sunlight or wind that may cause harm to plants and animals in the area affected. Abiotic stress is essentially unavoidable. Abiotic stress affects animals, but plants are especially dependent on environmental factors, so it is particularly constraining. Abiotic stress is the most harmful factor concerning the growth and productivity of crops worldwide. Research has also shown that abiotic stressors are at their most harmful when they occur together, in combinations of abiotic stress factors. Abiotic stress comes in many forms.

### **Introduction**

The most common of the stressors are the easiest for people to identify, but there are many other, less recognizable abiotic stress factors which affect environments constantly. Abiotic stress is stress produced by natural environment factors such as extreme temperatures, wind, drought, and salinity. Humankind doesn't have much control over abiotic stresses. It is very important for humans to understand how stress factors affect plants and other living things so that we can take some preventative measures. Preventative measures are the only way that humans can protect themselves and their possessions from abiotic stress. There are many different types of abiotic stressors, and several methods that humans can use to reduce the negative effects of stress on living things, viz i) Cold, ii) Heat, iii) Wind, iv) Drought, v) Adaptation of Plants, vi) Receptors.

### **Cold**

One of the types of Abiotic Stress is cold. This has a huge impact on farmers. Cold impacts crop growers all over the world in every single country. Yields suffer and farmers also suffer huge losses because the weather is just too cold to produce crops. Humans have planned the planting of our crops around the seasons. Even though the seasons are fairly predictable, the

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