ABSTRACT

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PROCEEDINGS

CROP WATER REQUIREMENT AND IRRIGATION PRODUCTIVITY

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TROPICING A PLANT

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Crop is deficient in nutrients (Hgsos, 1975) and a possible measure of the capability of the atmosphere to give back nutrients ET. ET of ET or ET* is now commonly calculated from ET. ET is expressed as an indicator of the crop's ability to transpire water from the soil. The deficit between ET and ET is the amount of water transpired by the crop. ET is the crop's potential ability to use water from the soil for transpiration.

Crop water requirement ET is the amount of water needed by the crop to maintain a certain level of growth. This level is often defined as the point at which maximum yield is obtained. ET is calculated from the difference between ET and ET. The deficit between ET and ET is the amount of water transpired by the crop. ET is the crop's potential ability to use water from the soil for transpiration.

An increased measure of the capability of the atmosphere to give back nutrients ET. ET of ET or ET* is now commonly calculated from ET. ET is expressed as an indicator of the crop's ability to transpire water from the soil. The deficit between ET and ET is the amount of water transpired by the crop. ET is the crop's potential ability to use water from the soil for transpiration.

Evapotranspiration and Energy Supply

Evapotranspiration is influenced by crop and soil coefficients. The influence exerted by crop and soil on ET, however, is not the same. Differences in growth conditions and plant vigor result in differences in ET. Differences in growth conditions and plant vigor result in differences in ET.

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Biomass production is the cumulative result of net photosynthetic assimilation in relation to CO₂ assimilation.

Transpiration and carbon dioxide assimilation are fundamental processes in the photosynthesis of biomass, which collectively depend on the amount of radiation absorbed by the crop, the amount of radiation reflected, and the amount of radiation absorbed by the crop. These interactions are depicted in Fig. 2. The surrounding factors of the crop and the climate, such as temperature, humidity, and light, influence the transpiration rate and photosynthesis efficiency. The relationship between CO₂ assimilation and transpiration can be understood through the photosynthetic quotient (Q), which is a measure of the efficiency with which plants take up CO₂ from the atmosphere.

The relationship between photosynthesis and transpiration can be expressed as a function of the crop's biomass production. This function is influenced by the environmental factors that affect the crop, such as temperature, humidity, and light. The relationship can be visualized through a graph, as shown in Fig. 3.

Pattern of ET by annual crops

The ratio of crop ET to base ET (Kc) is known as the crop coefficient (Kc).

\[ Kc = \frac{ET_c}{ET_0} \]

Where ET_c is the actual evapotranspiration of the crop, and ET_0 is the reference evapotranspiration.
...and the many common features shared between CO₂ assimilation and...
Very severe, as is discussed below, may be overestimated because pollution is eliminated only when water stress is occurring, therefore, results of the present study of the impact of pollution on the ecosystem are limited. However, the water stress is more than the impact of pollution on the ecosystem. The results of the present study are limited to the impact of pollution on the ecosystem, and the results of the present study are limited to the impact of pollution on the ecosystem. The results of the present study are limited to the impact of pollution on the ecosystem. The results of the present study are limited to the impact of pollution on the ecosystem. The results of the present study are limited to the impact of pollution on the ecosystem.
Overall assimilation is the process by which plants absorb and use light energy to convert carbon dioxide and water into glucose and oxygen. Assimilation typically occurs in the leaves of plants, where chloroplasts within the leaf cells contain the necessary enzymes and pigments to carry out the process of photosynthesis.

Water stress is a significant factor that affects plant growth and productivity. Water stress can lead to a decrease in plant growth, reduction in photosynthesis, and ultimately lower crop yields. The effects of water stress can be severe, particularly in arid or semi-arid regions where water availability is limited.

The diagram illustrates the effects of water stress on different growth stages and productivity. It shows how water stress can impact various stages of plant growth, from seedling to maturity, and how the severity of stress can vary at different life stages of the plant. Understanding these effects is crucial for developing strategies to mitigate water stress and enhance crop productivity.
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