

6th Oct,
MONDAY

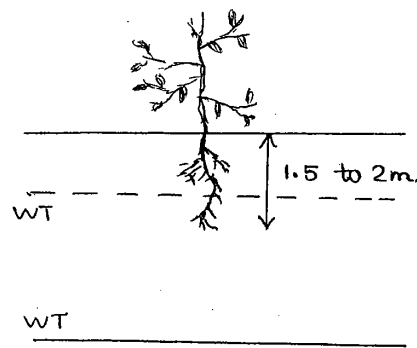
07 WATER LOGGING

Due to various recharge condition, the water table may reach the ^{root zone of} crop. Due to this, the air circulation in the root is cut off. This phenomenon is called as Water logging.

Eg: Punjab I - Indo Gangetic plains.

→ Causes

- (i) Seepage from canal system
- (ii) Seepage from reservoir
- (iii) Heavy rainfall.
- (iv) Improper surface drainage system.
- (v) Flat topography
- (vi) Over irrigation.



→ Effects

- (i) Yield of crop decreases.
- (ii) Aerobic bacteria is lost. (nitrification process is halted)
- (iii) Climatic damp (Low temperature).
- (iv) Low temperature leads to delay in germination of seed, ripening, restricted root growth.
- (v) Plant diseases.
- (vi) Land preparation becomes difficult.
- (vii) Soil turns into saline.

→ Control measures

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- (i) Lined canals.
- (ii) Provide proper drainage system.
- (iii) Training the cultivators.
- (iv) Conjunctive use of water. (use surface water & subsurface water)
- (v) Prevent overirrigation.
- (vi) Volumetric assessment of water.
- (vii) Cultivate some percentage of CCA only.
- (viii) Select crops which require less amount of water.
- (ix) Crop rotation.
- (x) Light irrigation.