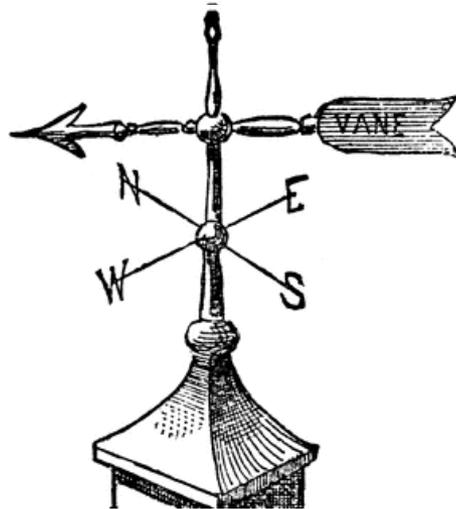
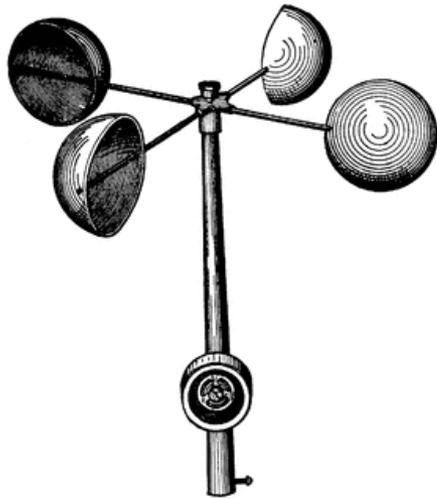


1(e). Basic aspects wind, wind direction and their application in crop production (Dr. T.N. Balasubramanian)



Horizontal movement of air becomes wind, which is triggered by temperature and atmospheric pressure

Wind and Crop production

Positive benefits

- Transport of CO_2 for photo synthesis,
- Temperature transfer from one place to other place:
- Irrigation management,
- Pest and disease management
- Transpiration and evaporation

Negative effect

- soil erosion control,
- crop lodging management

Wind Measurement and Instruments Used

Wind speed is reported in kmph and also in knot.
One knot=1.836kmph=1.47miles/hr.

Instruments used to measure wind speed

- Cup anemometer

Instruments used to indicate wind direction

- **Wind vane**

wind direction is reported in degrees;

East(90°),South(180°),West(270°) and
North(360°)

Wind speed and low pressure

Name of the system	Wind speed (kmph)
Low	31
Depression	31-61
Cyclonic storm	>61
Severe cyclonic storm	>88
Severe cyclonic storm with a cyclonic circulation core of hurricane winds	>118

Monsoon Winds in India

- Southwest monsoon wind
- Northeast monsoon wind