

Project

Name: _____

Grade: _____

Activity:

Suppose in a certain area the standard grass crop needs 5.5 mm of water per day.

Then, in that same area, maize will need 10% more water. Ten percent of 5.5 mm = $10/100 \times 5.5 = 0.55$ mm. Thus maize would need $5.5 + 0.55 = 6.05$ or rounded 6.1 mm of water per day.

Question

Estimate the water needs of citrus, bananas, onions, cucumber, clean cultivated apple trees and millet for an area where the water need of standard grass is 6.0 mm/day.

Answer Key

- Citrus: -30% (compared to grass); thus the water need of citrus is $6.0 - 30\% = 6.0 - 1.8 = 4.2$ mm/day
- Bananas: +20%; thus the water need of bananas is $6.0 + 20\% = 6.0 + 1.2 = 7.2$ mm/day
- Onions: same as grass; thus the water need of onions is 6.0 mm/day
- Cucumber: -10%; thus the water need of onions is $6.0 - 10\% = 6.0 - 0.6 = 5.4$ mm/day
- Apples (clean): same as grass; thus the water need of clean cultivated apples is 6.0 mm/day
- If the apples have a cover crop in between the trees, the water need would be 20% higher than grass and thus: $6.0 + 20\% = 6.0 + 1.2 = 7.2$ mm/day.
- Millet: +10%; thus the water need of millet is $6.0 + 10\% = 6.0 + 0.6 = 6.6$ mm/day