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WATER LOSE TRENDS IN SOIL

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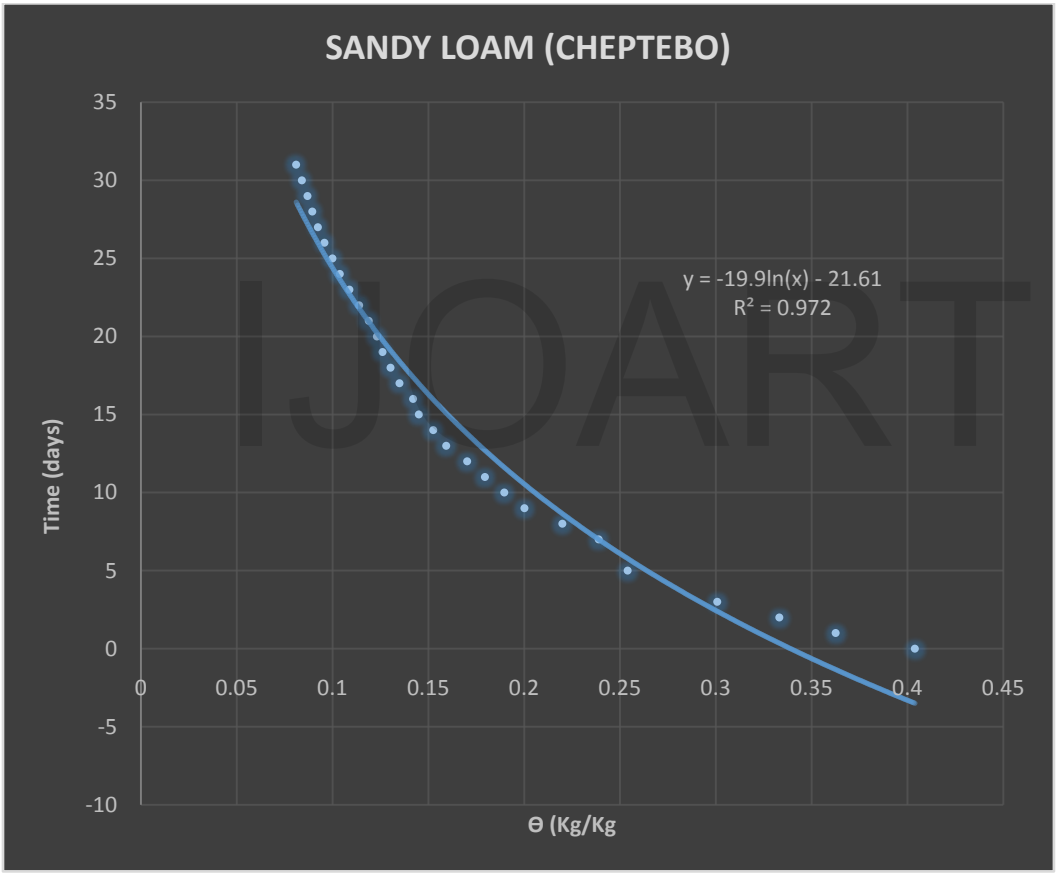
Water in soil are lost mainly through evaporation over the surface of the soil. In a research conducted at University of Eldoret in 2013, it was found that gravimetric water content Θ(Kg/Kg) drop with time (t) such that the two variables trace a predictable curve trend of the form.

t= -**a** ln(Θ) –**b** where **a** and **b** are constants. This trend can be adopted in approximating water content with time.



t = -19.98 ln(Θ)- 21.168

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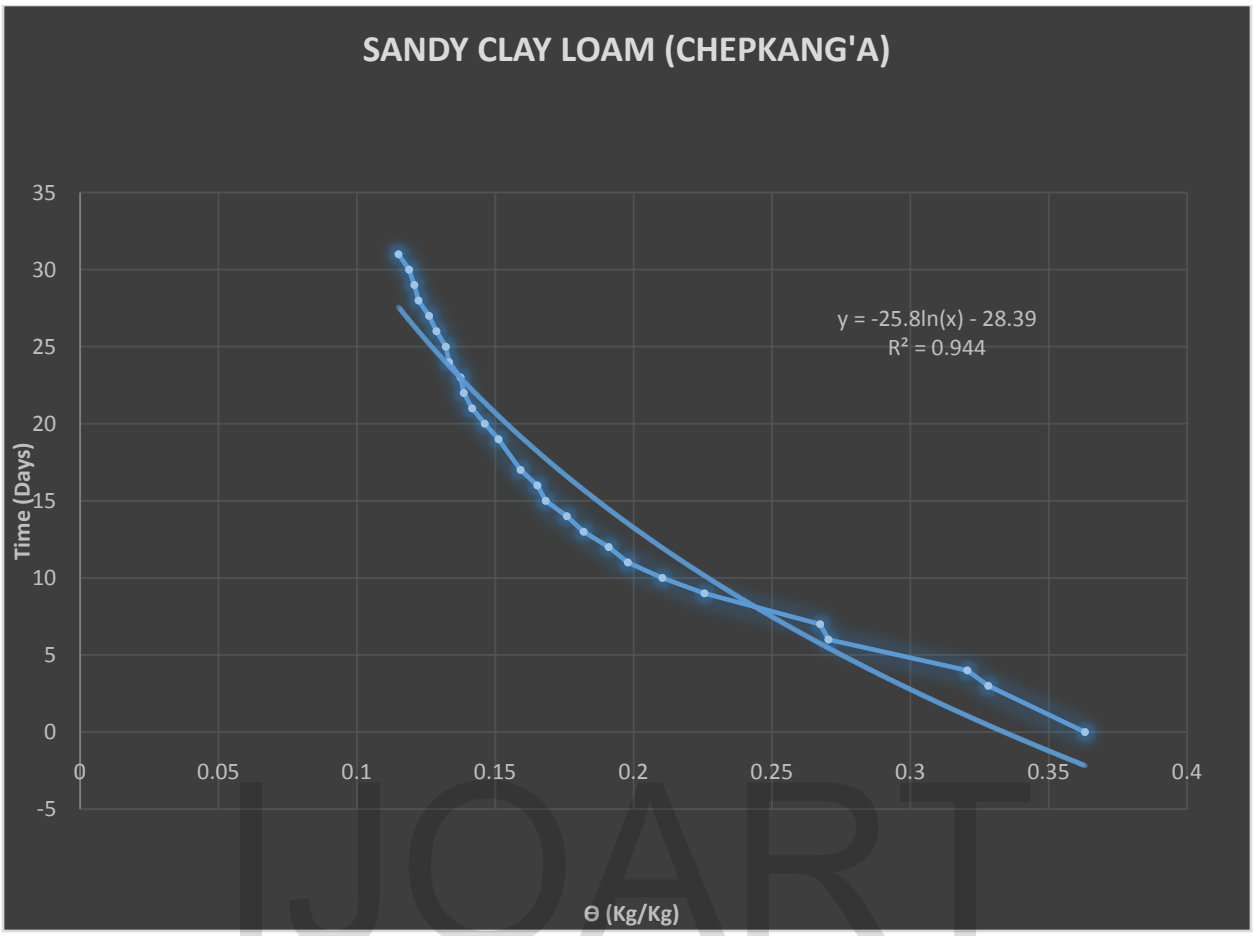
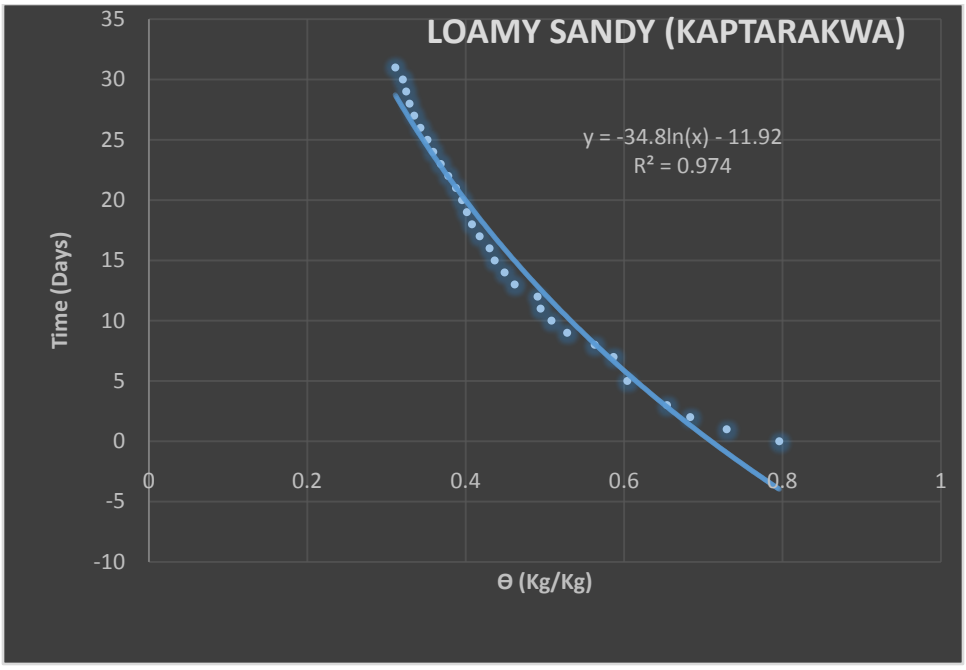


t = -25.88ln (θ) – 28.393



t = -34.81 ln(Θ) – 11.925

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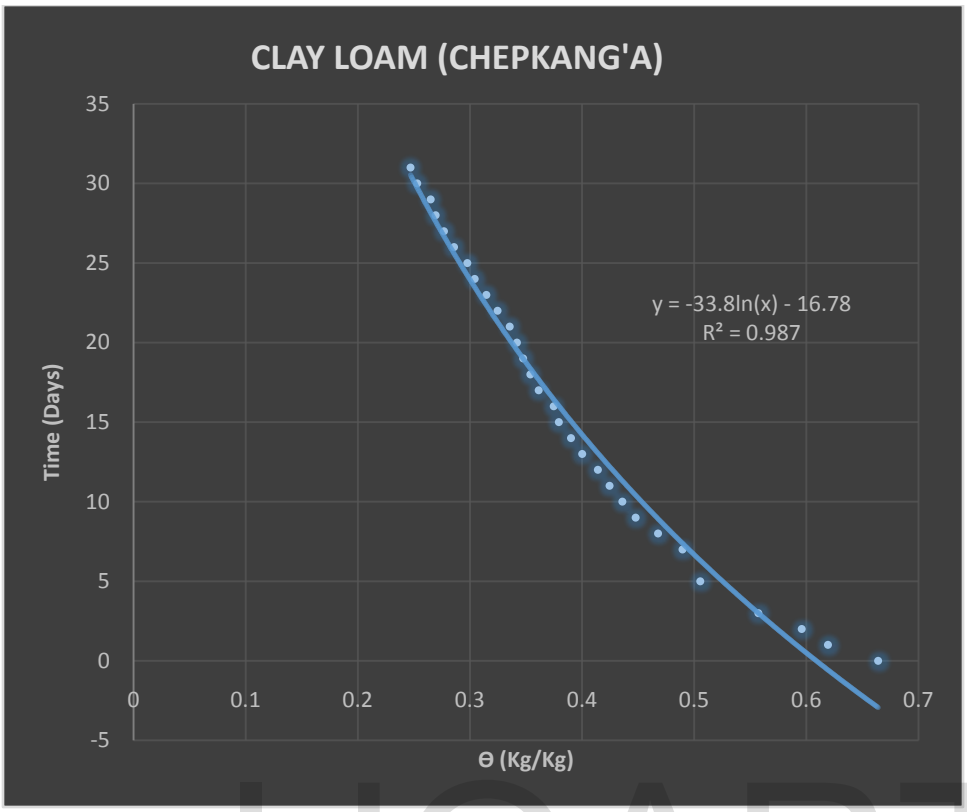

$$T = -33.85 \ln(\Theta) - 16.789$$

REFERENCES

Cheruiyot Samuel Kipkosgei. Fabrication and Calibration of Low Cost Soil Humidity Sensor. Msc Thesis, University of Eldoret. 2013

