'PATEL'S THEORY OF THIRTY-THREE' IS RIGHT TO CONTROL INCREASED GLOBAL WARMING.

Dr. Uma Shankar Patel

Department of Botany, Shoba Singh Yadav, Government College Patan, Affiliated to Rani Durgavati University, Jabalpur, Madhya Pradesh, India.

Abstract
Two tests were carried out on Spinach and Mung crops to assess efficiency of forests in decreasing global temperature which revealed that increase in 2% global forests will decrease global warming of 2 ^{0C}. 'Patel's theory of thirty-three is right to control increased global warming without affecting development.

Keywords: Two, Percent, Forests, Increase, Global, Warming, Zero.

Introduction

Global warming is a terror derived from combination of two English words: global and warming. Globe (noun) means the earth or the world and adjective of globe is global. Warm (verb) means to become warm and warming (noun) means the act of heating. Global warming (noun) is the increase in temperature of the earth's atmosphere caused by increase of certain gases (1, Dictionary). The most prevalent greenhouse gas is Carbon dioxide which increased 137 ppm in global atmosphere during last 271 years. The concentration of Carbon Dioxide gas increased from 280 ppm in 1750 to 367 ppm in 1999 (2, http….tar) and from 367 ppm in 1999 to 417 ppm by end of 2021 (3, http….Co2). The green plants absorb both Co2 of air as well as Photons (heat) of solar radiation from the global atmosphere by photosynthesis thereby cool to the atmosphere (4, Patel 2021). 'Theory of thirty' propounded by author in 2021 states: "Thirty three percent forest cover in the world is necessary to maintain natural global warming of thirty three Degree Celsius" (5, Patel 2021a). This theory has earlier been found right in an indoor experiment to resolve problem of increased global warming of 2 Degree Celsius by two percent additional reforestation in global land area (6, Patel 2022). A total number of plant species in the world is around 374,000 (7, Maarten). The cooling efficiency of two percent forests has again been assessed on Spinach (*Spinacea oleracea* L.) Family Amaranthaceae and Mung [*Vigna radiata* (L.) Wilczek] Family Fabaceae in indoore test chamber and which results are mentioned hereunder.

Materials and Methods

A temporary test chamber of size 13 x 15 x 38" volume was made up of 25 mm of thick thermal seats. Top surface of chamber was covered only by transparent gelatin film usually used in packaging of gifts. One side of chamber made as a door of removable thermal seat. All joints except one front side used as a door were affixed by cello tap thereafter white papers to make chamber air tight. Spinach (*Spinacia oleracea* L., Family Amaranthaceae) and Mung [(*Vigna radiata* (L.) Wilczek], Family Fabaceae) crops prepared in 9 x 9 size plastic/earthen pots. When crops formed a green layer on pot tests were carried out. Control pots were similar to test crops pots containing equal amount of soil and water. Spinach crop in 26 days and Mung crop in 14 days become ready for test. Urea was applied in Spinach for early growth but in Mung crop did not apply urea. Tests carried out under light of 9 Watt LED bulb and HTC-2 digital thermometer with an out sensor and lead was used. Crop pot put in middle of chambers and doors closed completely and made air tight by paper and cello taps. Reading as thermometer showed were taken on tables carefully at an interval of 5 minutes usually after 45-50

minutes readings became stable. Area of chambers crop calculated. Temperatures decreased by crops were converted into temperature decreased by forest after multiplication of crop temperature with 40 a constant which is Patel Crop Forest Converter (PCFC-40). Thereafter temperature decreased by 2 % forest was calculated.

Observation and Calculations

Observations noted in tables below and effect of two percent forests calculated below:

Table NO.: (1): Date: 28-01-2022.Time: 3.00 to 4.00 PM. Bulb: 9 W LED.

Crop: Spinach. 25 days old.Humidity: 60-70-%.Temperature in Degree Celsius.

Column No.	1	2	3	4	5	6	7
S. No	Reading of test chamber	Change in temperature	Reading of control chamber	Change in temperature	Total Temperature change	Changed temperature into PCFC	Temperature decreased by 2 % F.
1	17.9	17.9-17.4 = -0.5	15.5	15.6-15.5= 0.1	-0.5 + 0.1 = - 0.6	-0.6 x 40 = -24.0	-24 /10.52 = 2.28
2	17.7		15.5				
3	17.6		15.5				
4	17.5		15.5				
5	17.5		15.5				
6	17.4		15.6				
7	17.4		15.6				
8	17.4		15.6				
9	17.4		15.6				
10	17.4		15.6				
11	17.4		15.6				
12	stable		stable				

Calculation

8 inches long area covered by vegetation from a large and four small pots a total area 13x8 = 104squre inches. 8 inches is 21.05% of 38 inches long chamber. Half of 21.05 is 10.52. So, 21.05 is divided by10.52 to find 2 parts of 21.05. A total 0.6 Degree Celsius temperature is decreased by crop. -0.6 is converted into temperature decreased by forest multiplied with Patel Crop Forest Converter (PCFC), 40. Result is -24 Degree Celsius. Then -24 is divided by 10.52 to find 2 parts of -24 Degree Celsius which is 2.28 Degree Celsius. 21.05% area of forest decreased 24 Degree Celsius temperature of test chamber while 2% area of forest decreased 2.28 Degree Celsius temperature of test chamber. In other words, since, 21.05% area of forest decreased 24 Degree Celsius temperature, and then 2 % forest will decrease 2 x 24 / 21.05 = 2.28 Degree Celsius.

Table No. 2:
Date: 10-04-2022,   Time: 11.30 to 12.30,   Crop: Mung (14 days old),
Bulb: 9 W LED,   . Humidity: 32% to 58%.   Temperature: in Degree Celsius.

Column No.	Reading of test chamber	Difference in temperature	Reading of control chamber	Difference in temperature	Temperature decreases by crop	Temperature decease by forest	Temperature decease by 2% forest
S. No.		33.8-32.9 = -0.9		32.0-31.6 = -0.4	-0.9 - -0.4 = -0.5	-0.5 x 40 -20.0	20/10.12 =1.97
1	33.8		32.0				
2	33.8		32.0				
3	33.5		31.8				
4	33.1		31.8				
5	33.3		32.0				
6	33.3		32.0				
7	33.0		31.6				
8	32.9		31.6				
9	32.9		31.6				
10	32.9		31.6				
11	32.9		31.6				
12	32.9		31.6				
	stable		stable				

Calculation: 10" x10" = 100" square area of chamber is 20.24 % (approximate) of 494" square area of test chamber. A half of 20.24 are 10.12. Since, 20.24 % area of vegetation reduces 20 Degree Celsius temperature of chamber. Hence, 2 % area of vegetation will reduce: 2 x 20 /20.24 = 1.97 Degree Celsius. (ii) Since, 20.24 % area of vegetation reduces 20 Degree Celsius temperature of test chamber , hence, 2 parts of 20 is 20/10.12 = 1.97 Degree Celsius. (iii), since, 100" square area of vegetation reduces 20 Degree Celsius temperature of test chamber. Hence, 9.88 inches square (2 % of 494) area of vegetation will reduce: 20 x 9.88 / 100 = 1.97 Degree Celsius.

Result and Discussion
Crop of Spinach revealed temperature decrease of 2.28 Degree Celsius and that of Mung showed decrease of 1.97 Degree Celsius. Average of both two results is 2.12 Degree Celsius. Two percent forests have capability to reduce increased global warming 2 Degree Celsius. Therefore, increase in 2% global forests will decrease global warming of 2 Degree Celsius, Increased global warming = Forest increase 2 % – global warming decrease 2 Degree Celsius = 0 Degree Celsius. Different plant species have different efficiency of global cooling. Since seven grams green dry leaves (dried after test) of Spinach decreased temperature of test chamber by 2.28 Degree Celsius, hence one gram leaves could decrease 0.32 ^{0C}. While four grams green dry leave of Mung decreased 1.97 ^{0C} temperature of chamber, hence one gram could decrease 0.49 ^{0C}. Tests on all representative plant species are essential for final conclusion because about 3, 74,000 plant species are found in the world.

Conclusion

'Patel's theory of thirty-three' is right to fight issue of global warming. That is, 33 % average global forests will maintain natural global warming of 33 Degree Celsius. 33 – 33 = 0. Increase of about 2 Degree Celsius global warming will become zero by increase of average approximate 2 % forests across the globe.

References

1. **Amar Advanced Learner's Dictionary** (English-English- Hindi). New Edition, Kamal Prakashan, New Delhi, India, ISBN: 81-89755-60-9. Pp. 571, 1223.
2. http://www.CO_2.earth>daily- CO_2.
3. Uma Shankar Patel (2021). Patel assumption about increase in global warming. *International Journal Multidisciplinary Research Review*. **7 (6)**: 8-9.
4. Uma Shankar Patel (2021a). May theory of thirty three be right to fight issue of global warming. *International Journal Multidisciplinary Research Review*. **7 (6):** 27.
5. Uma Shankar Patel (2022).Theory of thirty three is right to fight issue of global warming.
   a. *International Journal Multidisciplinary Research Review*. **8 (1):** 31-34.
6. Maarten J. M. Christenhuszthe and James W. Byng (20 May 2016). The number of known plant species in the world and its annual increase. *Phytotaxa* **261 (3):** 201-217. http://www.mapress.com/j/pt/.
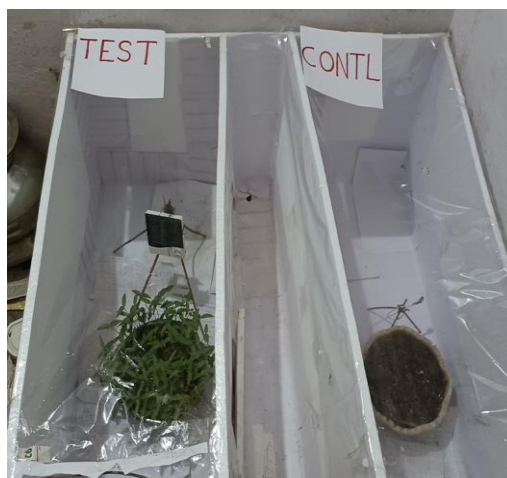
Figure

:

Figure – I. Artificial test chamber for assessing efficiency of two percent forest in global cooling.