

**The effect of potentized  
mercuric chloride on  
alpha-amylase is  
transported from one  
test tube to another,  
connected through  
capillary water**

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## ❖ **PRESENT POSITION**

- 1. Director, Sukul Institute of Homeopathic Research, Kolkata, India.**
- 2. Editor, Clinical and Experimental Homeopathy.**
- 3. In the Editorial Team of International Journal of High Dilution Research, (IJHDR), Brazil.**
- 4. Practicing homeopathy since October 1999.**

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imagestate



**Mother suckling baby (Monkey)**

**Homeopathic medicine given to nursing mother cures her ailing new born baby**



## Mother suckling baby (Human being)



**Homeopathic medicine given to nursing mother cures her ailing new born baby**



**Potencies above  
12CH are too  
dilute to contain  
original drug  
molecules. It is  
thought that water  
structures carry the  
information of  
original drug  
molecules**



**This aspect has  
been tested on  
Animal and  
Plant models.**

**a. Test on  
plants**

**b. Test on  
animals**



To see whether the effect of heat shock and of homeopathic treatment could be transmitted from one plant to another through a column of water in a tube connecting the two plants.

**PURPOSE**





# Materials

- Cowpea (*Vigna unguiculata*)- surface sterilized.
- 5 batches.
- Four batches were arranged in pairs and kept side by side.
- Pots of each pair were 85 cm apart.
- Each set containing 20 plants.



# Separation of proteins

- Leaves were harvested one hour after heat shock, and one hour after *Cantharis* treatment. Treated leaves and those immersed in water were not harvested.
- Protein separation was done by Fast Protein Liquid Chromatography (FPLC).



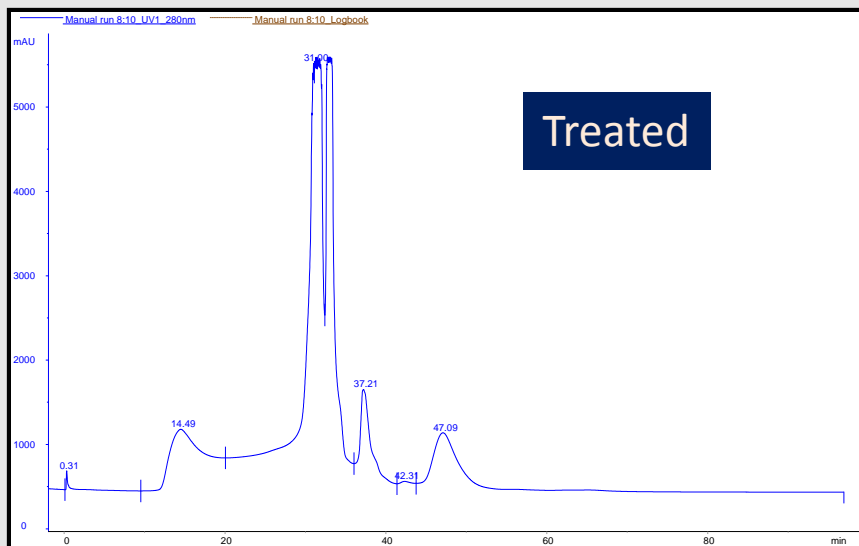


**GE healthcare, AKta purifier, model 10**



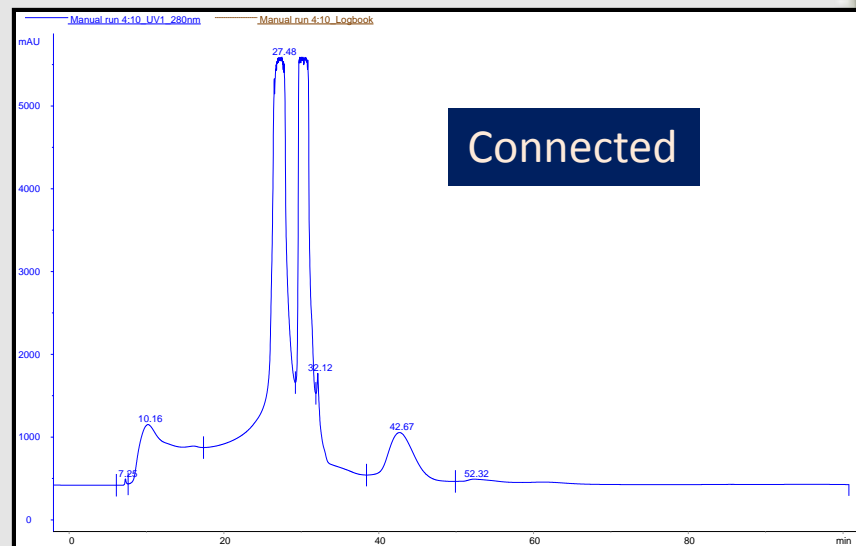
# Heat stress and Heat capillary

A  
b  
s



Retention time

A  
b  
s

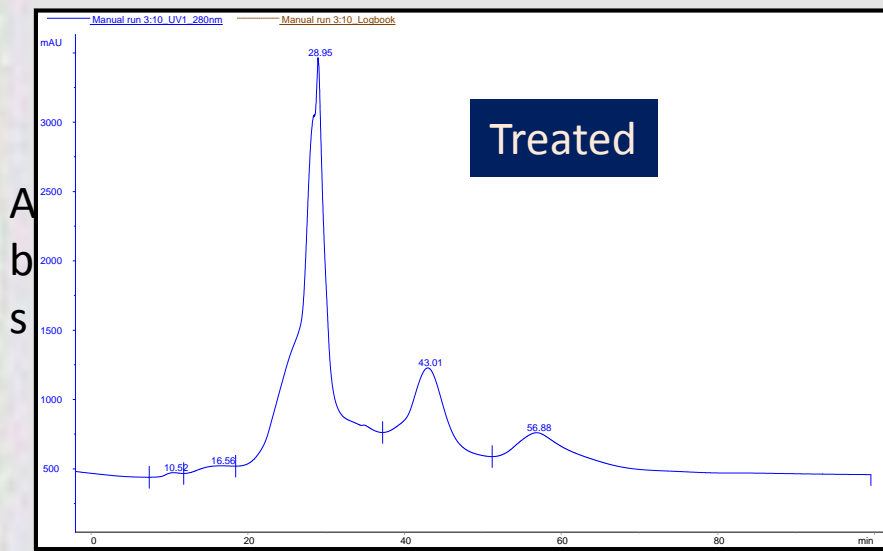


Retention time

□ There was a marked similarity between the heat stressed plants and the water connected unstressed plants in the leaf protein profile.

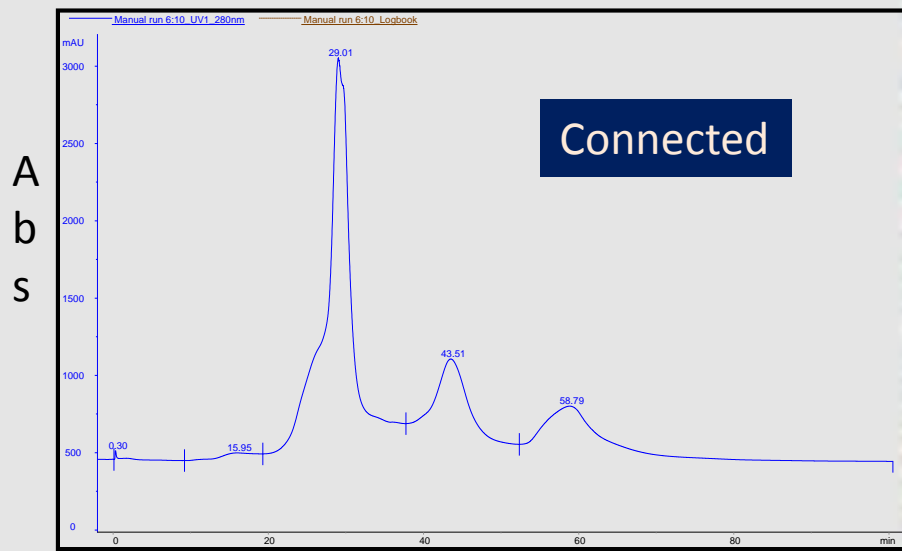


# *Cantharis* treated and *Cantharis* connected



Treated

Retention time



Connected

Retention time

☐ *Cantharis*-treated plants and untreated but connected plants showed similarity in the leaf protein profile.



# CONCLUSION

Plants pretreated with Cantharis and then heat-stressed did not show heat-shock proteins because these proteins were bound to other proteins following heat shock.

The present study shows that Cantharis 200c does the same thing as heat -stress in inducing the expression of heat shock proteins in the plant observed. The two stimuli are different but the response is the same.



**A toad held vertically against a stiff plastic sheet with one hind limb dipped into Nux vomica 200 CH diluted with water 1:500 in a beaker and another hind limb dipped in water in another beaker.**



**The aim of the present study  
is to see the drug effect,  
transferred in cell - free  
media, kept in test tubes**





# Methods

*Two test tubes, each containing 1 ml of 1% starch solution and 1 ml of  $\alpha$ -amylase, were connected by means of wet cotton threads encased in a polythene tube. One of the tubes also contained Mercurius corrosivus (Merc-c) 30 CH and the other ethanol solution (control). After 15 min, the enzyme activity was stopped with DNSA, and the breakdown product of starch, maltose, was estimated. A third, separate tube contained all the tested materials except for Merc-c and the control solution.*

*In a second experiment two tubes, one containing 1,200 ppm and the other 200 ppm of maltose, were similarly connected over 15 min. Both experiments were repeated 20 times*



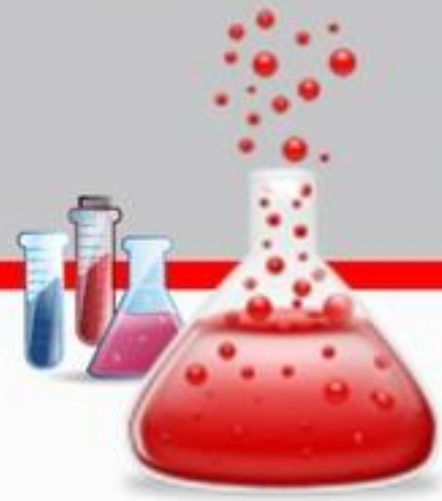


**Test tube containing Merc-c 30CH (far left) connected to a test tube without the drug (second from left). Test tubes containing ethanol control I (third from left) and distilled water control II (fourth from left). Test tube on the far right was used as reference.**



# Preparation of reagents

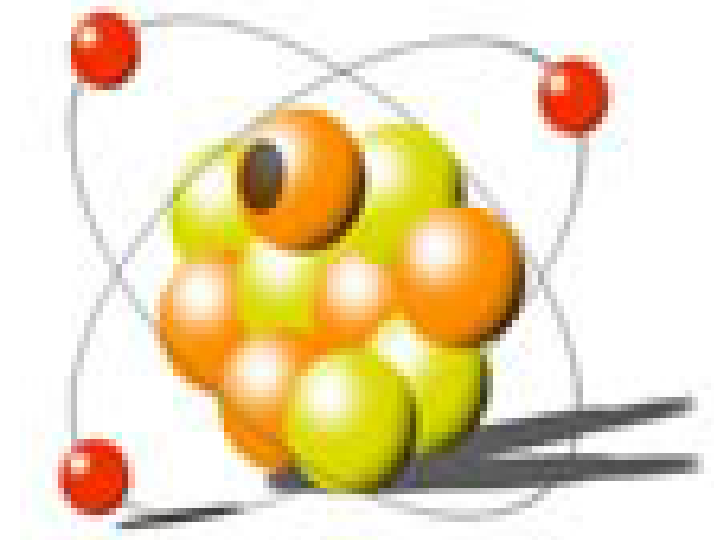
*DNSA reagent was prepared with 1g dinitrosalicylic acid (DNSA), 0.2 g crystalline phenol and 0.5g sodium sulfite. DNSA was then dissolved in 100 ml sterile distilled water with 1% NaOH, and stored in the dark at 4°C. Rochelle salt was prepared with 40g potassium sodium tartrate dissolved in 100 ml distilled water, and then placed in sealed glass vials and stored at 4°C. Soluble starch (SRL, Mumbai, India) was dissolved in 0.1M sodium acetate buffer (pH 4.7) to prepare 1% starch solution. Porcine  $\alpha$ -amylase was obtained from SRL.*

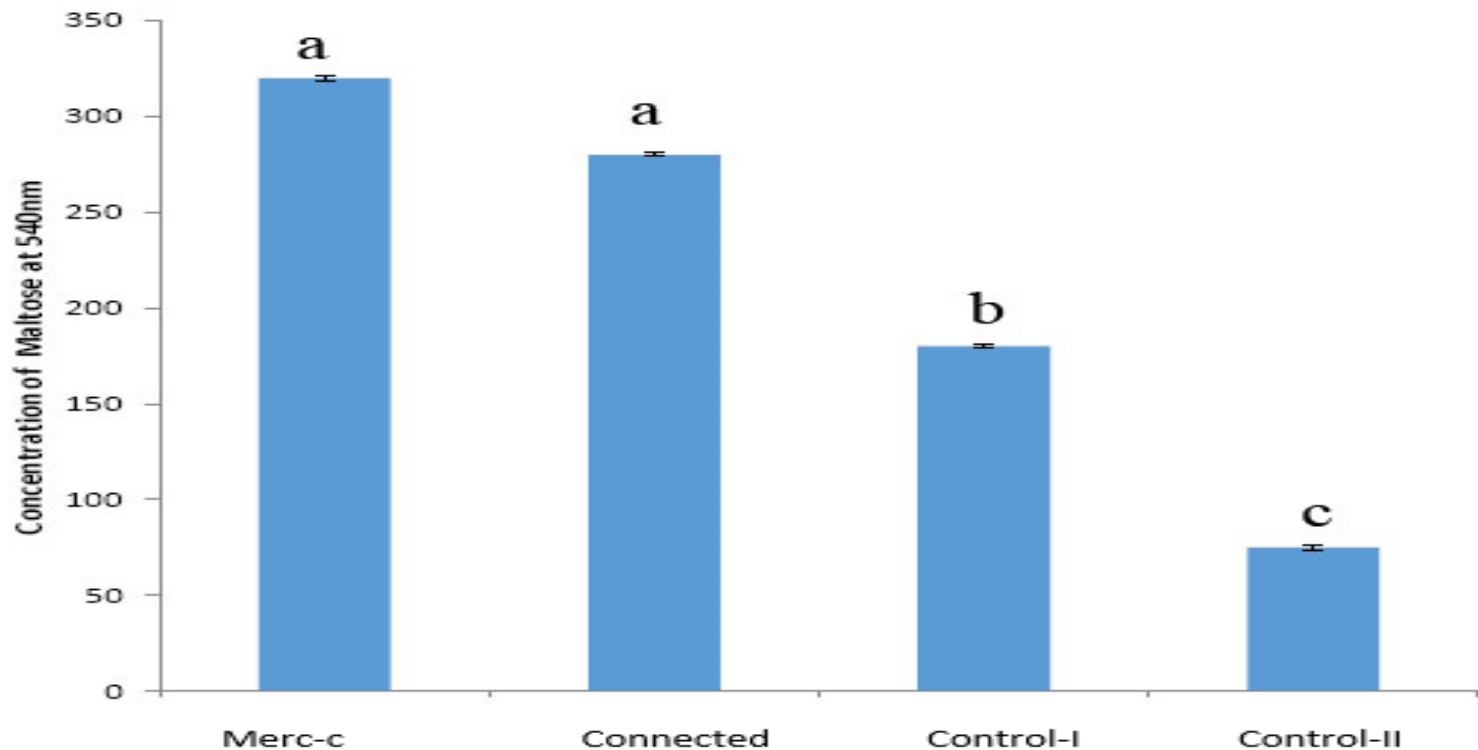




# Results

*In the first experiment, the amount of maltose was similar in both connected tubes, but it was significantly lower in the unconnected tube. In the second experiment, maltose concentration in both tubes remained unchanged*





**Figure: Direct treatment with *Merc-c* 30CH, 2. Test tube without *Merc-c* 30CH, but connected to tube 1 by a cotton thread. 3. Test tube containing diluent ethanol only (Control I). 4. Test tube containing distilled water instead of drug or ethanol (Control II).**

***a, b, c : different lowercase letters indicate significant difference ( $p < 0.01$ ) by one-way ANOVA followed by Student's t-test.  $n = 20$ .***



# CONCLUSION

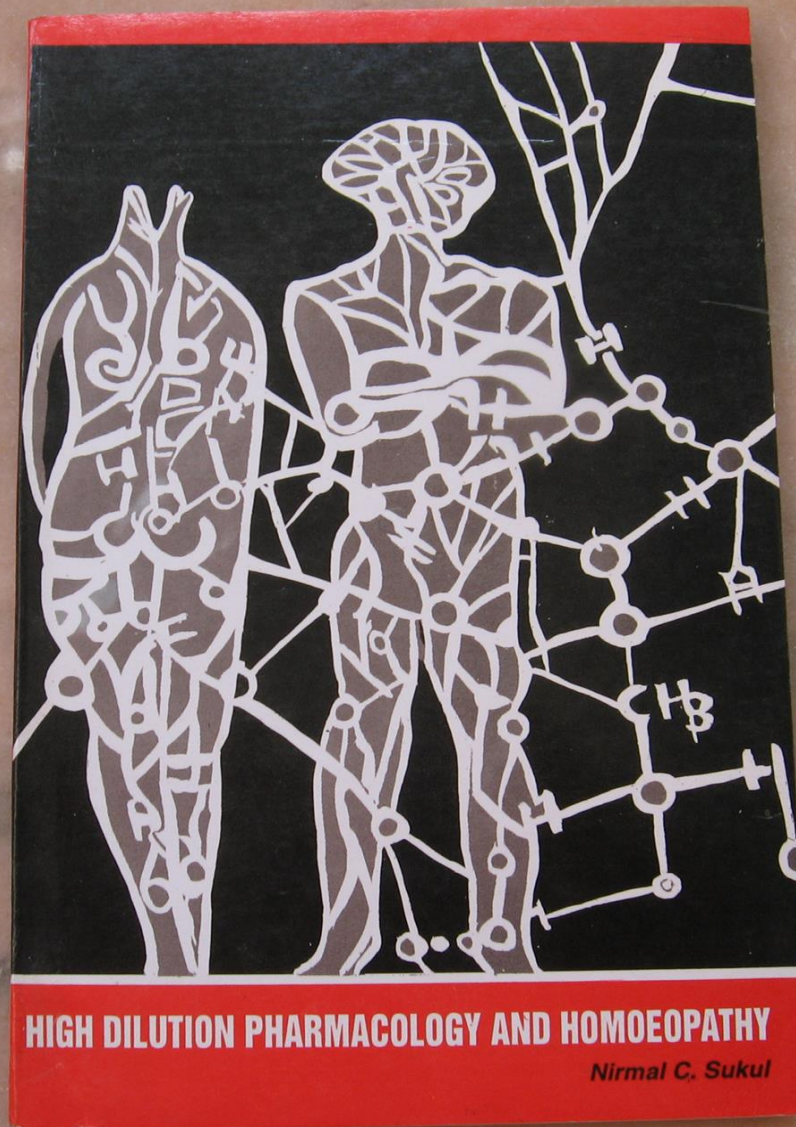
*The information of Merc-c 30CH was effectively transferred through capillary water between two tubes in cell-free medium. This effect was not due to physical transfer of either solvent or solutes. Water seems to be the most probable carrier of information in diluted and agitated solutions.*



A decorative border with intricate, symmetrical floral and scrollwork patterns in a dark red color, framing the central text.

# Acknowledgment

I am thankful & grateful to  
Sir Ratan Tata Trust of Mumbai India,  
for providing me the travel grant for  
participating this conference.



**HIGH DILUTION PHARMACOLOGY AND HOMOEOPATHY**

*Nirmal C. Sukul*





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Salus Infirmorum



***Standing in front of the cemetery of Dr. Hahnemann in Paris, France***



*Thank*  
**YOU**