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Whites Science
A Scientific Erudition

Computer & Electronics Can Prove Root the Centre of Life, Stem Dynamics May Flower Proportionately in any Geography

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ABSTRACT

In plant-science this is well known that root keeps a plant alive. Once root is spoiled plant dies. This a little experiment in this research communication with aquatic plant namely, *Ipomoea reptans*. This plant has values since Vedic, hence may this plant may become extra popular, and however this plant may survive when root is existed. In a natural experiment given less than 3 ppm Oxygen, plant remained under stress. With given 0 ppm Oxygen plant dies. Plant may get rejuvenated above 3 ppm Oxygen. This detection is being now-a-days possible using computer and electronics are being used to measure dissolved oxygen digitally. This may be same in terrestrial plants as well. There is soil air measured in percentages (0-50%) and digitally Nano-biotechnology may determine at what location the precious life exists even in plant. Nanotechnology a part of this is a science where water bio-molecules are measured in Nanometer (!0 A^{o}) scale to make life persists. Now-a-days molecular dimension can be measured by electronically or Spectro-photometric or mass methods using nanotechnology such DO meter. Author has found that in flowering plants, here with an example *Ipomoea reptans* the number of flowerings(F_n) is equally proportionate to the effective stem mass(M_s) or volume(V_s) as Fn α M_s or F_n α V_s, The value of these Coefficients in two situations usually differ, as stem mass may increase with watering enhance flowering till field capacity. Although their values are also depend on photoperiodic, however if flowerings occurs in certain geography and environmental conditions, value of coefficients remain almost similar.

Keywords: Centre of plants life, Plant flowerings, Computer &electronics

INTRODUCTION

Without dissolved oxygen (DO) and water, life may not be possible for most organisms and even higher aquatic plants. Here is an experiment that shows lowering Dissolved Oxygen may have a severe stresses for aquatic life for fish and aquatic plants even. Basic concept being with bio-molecular dimension and their concentration can be measurable with the help of computational nano-biotechnology or even with the super computer. Such molecules to bio molecules are the matter of computation as well in terms of nono-meters and may be crucial in identifying the existing or origination of life or to identify the centre of softer precision to start life with. Nanotechnology may be applicable in revealing existing of life as well. Scientific literature may say that the origin of life might have been initiated in tropical region may be owing to pre-historic thunderstorms and then simple hydrophilic amino-acid generated and life. Without moisture life is not possible. Moisture meter, Tensiometer, Osmometer, TDS meter computer and electronics can frequently be judged moisture contents even at cellular level. Molecular dimension of water molecule is 0.1 nm however owing to unique hydrophilic and existence of hydrogen-bond and moisture makes a life better. In this short communication authors felt that root system of any plant may have the maximum moisture content compare to other plant organs hence may have the centre of life in this plant organ and plant as a whole. *Ipomoea reptans* is an example plant species t0 carry-out this experiment. This aquatic plant respire their root system through dissolved oxygen available in an aquatic medium

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Technicality of this programme is simply by replacing dissolved oxygen with organic gas such as CH_4, SO_2 which may evolves owing to pollution may reduce DO value to even 0 (Zero) ppm. Oxygen being replaced in bottom column by CH_4 and Upward column by SO_2 May also rare natural phenomena found. Under the normal condition dissolved oxygen content in freshwater of tropical climate may remain within the range of 3 to 14 ppm. The followings are also included in this research communication:

1. Softest tissue (often root) may be the centre of life in any plants
2. Forming soft tissue to hard tissue is a living process of plant as usual
3. Hard tissue to soft tissue may also possible owing to re-living a life
4. Plant flowerings even in aquatic plants is directly proportionate the matured or semi-matured stem tissues or their volumes.

All may be known that flowering bio-molecules are synthesised in semi-matured to matured stem. This may be the basic phenomenon of plant biotechnology of flowering plants. Authors have found this in Papaya (*Carica papaya* L.). As observed that thicker the stem having more growing tissue helps in more flowerings noted that a high correlation (0.98) between stem thickness and number of flowers could be found in papaya. Semi matured stems of 3 months may produce flowers, however, stem having lesser diameter (<2 cm) owing to extreme micro environmental stress may not produce flower at all in Papaya. The flowering bio-molecules are synthesised from its matured stem found in drumstick (*Moringa sp*) and Mustard (*Brassica nigra*) are also experimented. Since flowering bio-molecules are synthesised in growing tissues of trunk and matured stem for all flowering plants, later found by that this is proportionate to either stem=mass or stem volume. Leaf arises from trunk and matured stem helps in flower initiation. It is found that tree having affected cambium tissues may not produce flowers where as healthy trunk having well developed growing tissue produces prolific flowers having 1-18 flowers in a single bunch (Figure 1) and can bear a total number of fruits (0 to 246). It is reported that even doubling number of fruiting could be possible to appear. Randomness of fruit bearing in Papaya trees as follows when number of leaves, inter plant spacing, amount of sunshine, trunk health are variable factors. Data collected during the flowering days of papaya is tabulated, compiled and the co-efficient of correlation between flowering leaves and flowers is estimated. Pictorial presentations are also made using spread-sheet. It is observed that thicker the trunk more the formation of flowering leaves and hence flowering. Damaged trunk or trees grown under environmental stress may produce no flowering and hence fruit formation in Papaya tree. However, it is observed that once there is flowering, rate of transformation from flower to fruit is considerably remains high under healthy environmental condition.

Flowering bio-molecules are synthesised from its matured stem also found in Drumstick by the same author in (*moringa sp.)* as flowering bio-molecules of plant are synthesized from its matured stem and produce flower. Flowers appear in two experimental plant-cuttings grown in soil having no leaves nor having any strong root systems. Flowering bio- molecules are synthesized in growing tissues of matured stem of 10-14 cm diameter, aged more than three years found in drumstick, *Moringa sp.* However, in normal plant of drumstick flowers appear at the tip of the shoot and above the leaves assumed that flowering bio- molecules are synthesized in matured-stem and has to move at the tip of the shoot. It is probable that plant bio-molecules of flowering or flowering bio- molecules are a lighter substance than plant photosynthetic produce or other food substances that need to transmit in fruit. Amount of flowering bio-molecules or florigen produced from a matured stem in variable amount since there are variations in number of flowers in bunches, having ranged 5 to 72.

Modelling is also performed in Mustard (*Brassica nigra var Tori*) for obtaining the maximum yield is also being communicated. As stated it is observed that number of flowers has significant correlation (0.9) with shoot length is found. Regression study (Figure 2) here, actual stem length is considered instead of effective stem length that may differ partially from actual stem length and remains in growing part of the mustard plant. Linear regression equation between the number of flower (Y) and stem length in cm (X) as found: as following equation : $y = 1.4054x - 2.1783$, $R^2 = 0.77$, for Black Mustard (Figure 2 and 3).

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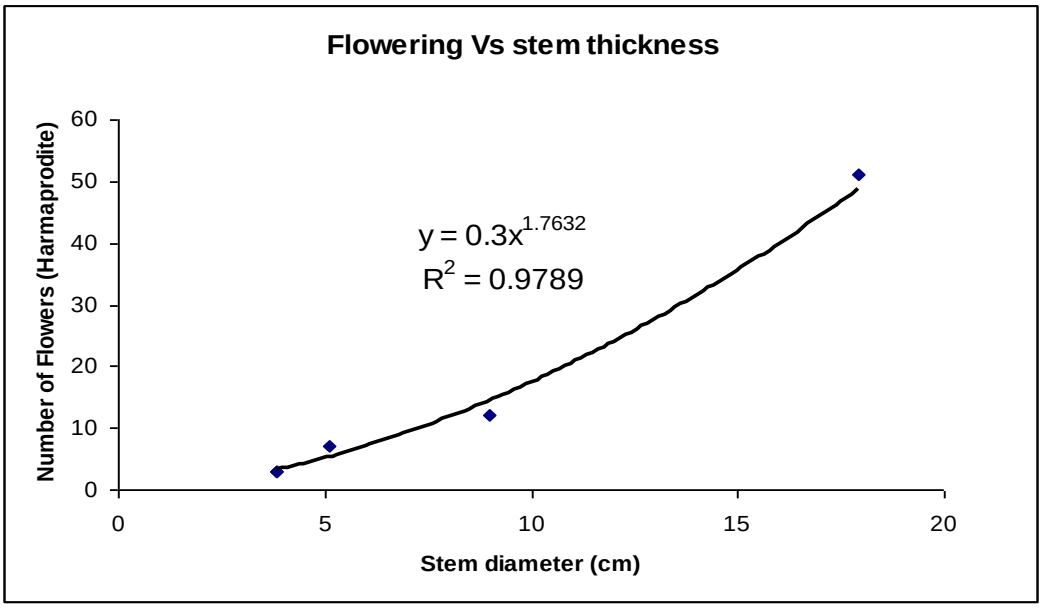

Figure 1: Distributed flowers and stem diameter and of Papaya (*Carica papaya)*

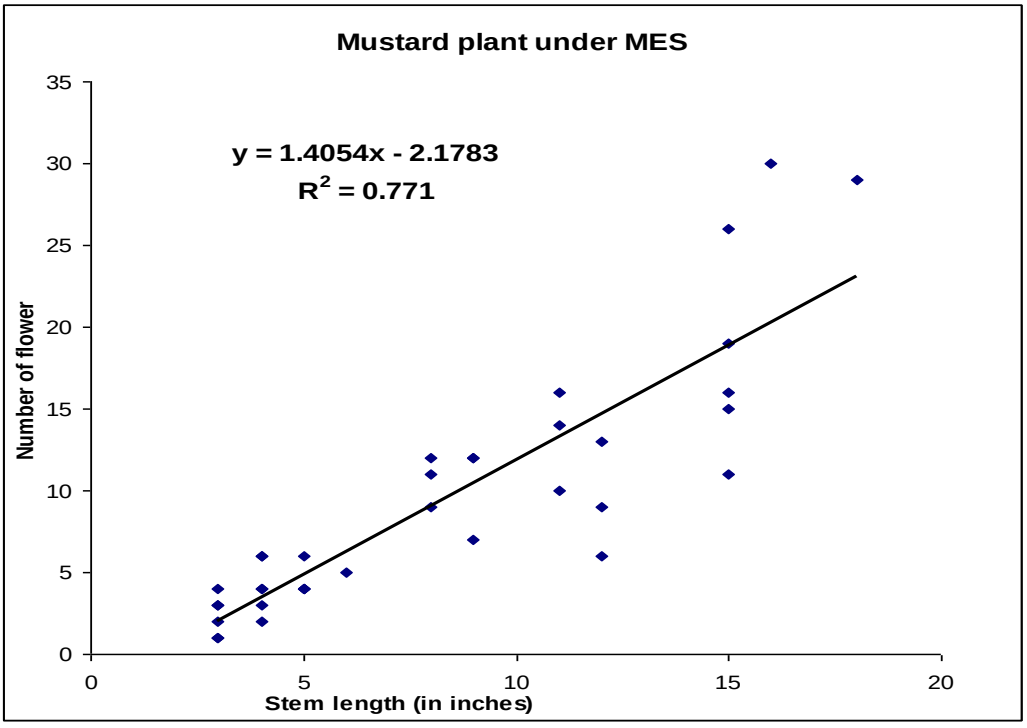

Figure 2 (a): Scattered plot diagram along with regression equation between number of flowers and stem length of *Brassica nigra* Koch

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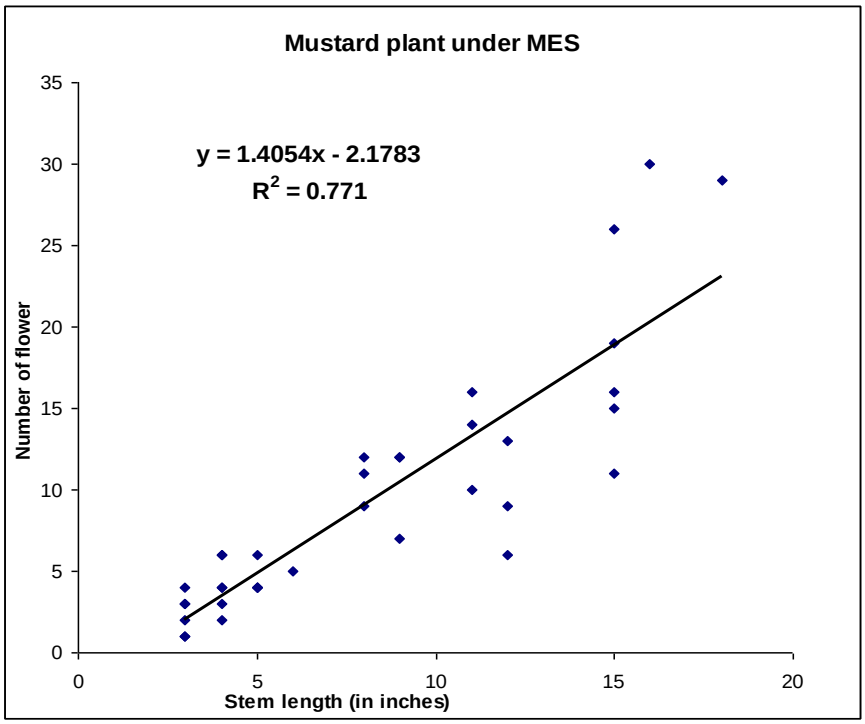

Figure 2 (b): Scattered plot diagram along with regression equation between number of flowers and stem length of *Brassica nigra* Koch

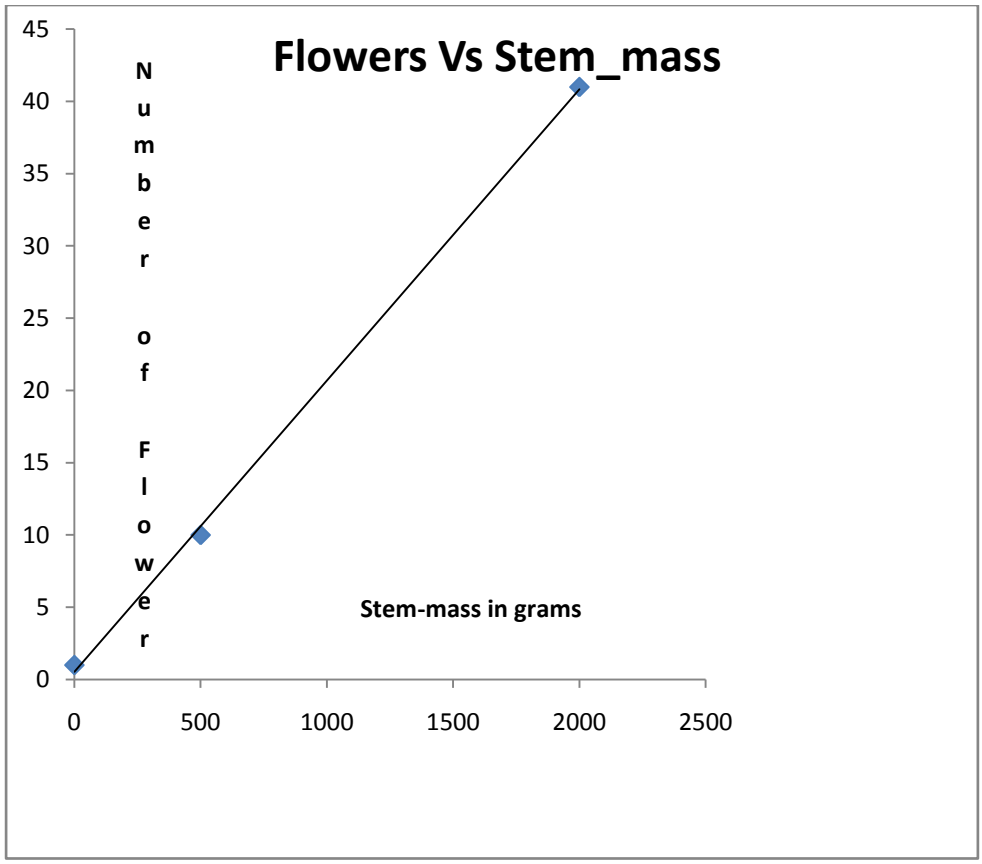

Figure 3: Proportionate flowering with stem biomass in Ipomoea reptans

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Plant flowerings is proportionate to the stem mass or stem volume found, With an example *Ipomoea reptans*, may also found in most flowering plants.

METHODOLGY

Prior to this, we know the technicality of proving the root is crucial to keep a plant alive, experiment is simply by replacing dissolved oxygen (DO) with organic gases such as CH_4, SO_2 which may evolves owing to pollution may reduce DO value to even 0 (Zero) ppm. Oxygen being replaced in bottom column by CH_4 and Upward column by SO_2. This may also a rare natural phenomena found. Under the normal condition dissolved oxygen content in freshwater of tropical climate may remain within the range of 3 to 14 ppm. Principles of methodology are derived and as stated below as per data collected, often and hypothesised the following. This is well known that in plant-science this is known that root keeps a plant alive. Once root is spoiled plant dies. We have a little experiment in this research communication with *Ipomoea reptans*. This plant has values since Vedic used as vegetable and medicinal purpose. Recent research shows that this plant may reduce TDS in water so that fish can breed naturally. Hence may this plant become extra popular; however this plant may survive when root is existed. In a natural experiment within our methodology this has been given less than 0 ppm Oxygen plant dies. Below the 3ppm oxygen Ipomoea remained under the environmental stress. Given 0 (zero) ppm Oxygen plant dies simply because to prevent respiration from such experimental aquatic medium although the stem remain aerial. Plant may get rejuvenated above 3 ppm Oxygen. This detection is being now-a-days possible using computer & electronics, being used to measure dissolved oxygen. This same phenomenon may occur even to same in terrestrial plants as well. There is soil air measured in percentages (0-50%) and digitally Nano-biotechnology may determine at what location the precious life exists even in plant. Nanotechnology a part of this is a science where water bio-molecules are measured in Nanometer (10 A^o) scale to make life persists. Molecular dimension can be measured by electronically or Spectro-photometer or mass methods using nanotechnology such DO meter. As stated in plant-science this is well known that root keeps a plant alive. Once root is spoiled plant dies. We have a little experiment in this research communication with aquatic plant namely, *Ipomoea reptans*. This plant has values since Vedic, hence may this plant may become extra popular, and however this plant may survive when root is existed. In a natural experiment given less than 3 ppm Oxygen, plant remained under stress. With given 0 ppm Oxygen plant dies. Plant may get rejuvenated above 3 ppm Oxygen. This detection is being now-a-days possible using computer and electronics are being used to measure dissolved oxygen digitally. This may be same in terrestrial plants as well. There is soil air measured in percentages (0-50%) and digitally Nano-biotechnology may determine at what location the precious life exists even in plant. Nanotechnology a part of this is a science where water bio-molecules are measured in Nanometer (10 A^o) scale to make life persists. Now-a-days molecular dimension can be measured by electronically or Spectro-photometric or mass methods using nanotechnology such DO meter. Author have found that in most flowering plants like *Ipomoea reptans,* as well this is found that number of flowerings (F_n) is equally proportionate to the stem mass (M_s) or volume(V_s) as F_n proportionate to M_s or F_n proportionate to V_s, The value of these Coefficients in two situations usually differ, as stem mass may increase with watering enhance flowering till field capacity. Although their values are also depend on photoperiodic however if flowerings occurs in certain geography and environmental conditions, value of coefficients remain almost similar.It has been noted that if there is stem, there may flower after certain maturity of stem. Author has considered the effective stem biomass is important. As plants like date palm, Coconut, Aracanut etc. the effective stem biomass almost remain the same. In most other flowering plants the effective stem biomass is found a Normal Distribution with time span of seasons or years. In plant science, the existence of life is derived whose centre of life is root and in aquatic-plants this can be determined with nanotechnology in Computer and electronics instruments.

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RESULTS AND DISCUSSION

Basic concept being with bio-molecular dimension and their concentration can be measurable with the help of computational nano-biotechnology or even with the super computer. Such molecules to bio molecules are the matter of computation as well in terms of nono-meters and may be crucial in identifying the existing or origination of and life or to identify the centre of softer precision to start life with. A nanotechnology may be applicable in revealing existing of life as well. Scientific literature may say that the origin of life might have been initiated in tropical region may be owing to pre-historic thunderstorms and then simple hydrophilic amino-acid generated and life. Without moisture life is not possible. Moisture meter, tensiometer, osmometer, TDS meter or even a computer can frequently be judged moisture contents even at cellular level. Molecular dimension of water molecule is 0.1 nm however, owing to unique hydrophilic and existence of hydrogen-bond and moisture makes a life better. In this short communication authors felt that root system of any plant may have the maximum moisture content compare to other plant organs hence may have the centre of life in this plant organ and plant as a whole. *Ipomoea reptans* is an example plant species tp carry-out this experiment. This aquatic plant respire their root system through dissolved oxygen available in an aquatic medium. *Ipomoea reptans* (Figure 4 to 6) is considered as quality vegetable using Aquaculture and nanotechnology since Vedic era to provide a life. Root is never being consumed. This may be the essence of quality plant-foods contrasting to other foods as followed by vegetarian community. Author has also made figures given below and its modelling with *Ipomoea* in a tropical garden of own in West Bengal and in search of the origin and centre of life in plants (*Das, 2018*).

Figure 4

Figure 5

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Figure 6

Figure 4 to Figure 6: *Ipomoea reptans* 4. The root the centre of life 5. Root initiation root initiation (hard to soft) 6. Flower-bud/s proportionate to stem-mass, or stem-volume, like the all other terrestrial flowering plants, as well

CONCLUSION

May the known that a well stem of any flowering-plant is the actual meanings of plant flowerings hence we may care plants, accordingly. This is being known in living system and also known that the softness may also be stem, is owing to moisture however, this experiment may prove that root may have the softest tissue and centre of life in any living plant. May be this is why people often discard mostly root parts, if this is radish then its softest tips. In precision, life may change owing to variable molecular dimensions of water molecule may vary with the changing temperature, and such a little measure can be detectable using nanotechnology may be the basis of every life also affinity of hydrogen bonds may be variable in aquatic system owing to temperatures. Moist and softer tissue may exist a life prolonged. This may be the reason that owing to moisture is ultimate of life. Prior this botanical (*Mitra et al., 1985*), communicating author has also experimented in fisheries science in fresh-waters that, no inland fish may naturally can breed well above the osmotic-pressures of 200 ppm TDS (Total Dissolved Solids) or equivalently available in fisheries ecological waters. This may be to initiate synthesis process of life even with soft water with adequate Oxygen. May be correct that female gets prolonged life owing to softness once proper moisture provided in, however male may become stronger often may lead to re-life or re-synthesis process even at any aqua-culture systems

Author have found repetitively that in most flowering plants like *Ipomoea reptans,* as well this is found that number of flowerings (F_n) a process of life initiation may equally proportionate to the stem-mass (M_s) or stem-volume(V_s) as $F_n \alpha M_s$. where $F_n = K_m . M_s$ when K_m is the co-efficient of flowering with respect to stem-mass. $F_n \alpha V_s$, where, $F_n = K_v . V_s$ when α denotes the proportionate symbol, K_v is the co-efficient of flowerings with respect to stem volume. The values of two co-efficient (K_m and K_v) differs unless specific gravity of stem-tissue remain unity, in both the situation, stem-mass or volume when increases, flowering is also increased proportionately. This may also enhance through watering a living plant. Coefficients in two situations differ, as stem mass may increase with watering enhance flowering till field capacity. Although their values are controlled on photoperiodic and environmental conditions. However, if flowerings occurs in certain geography and environmental conditions, value of coefficients remain similar viz. constant when input-parameters either stem mass or stem volume are being rounded. Most simplified fact in plant science always remains that no stem no flowering hence why not we should care for stems at this age of computer & electronics.

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REFERENCES (Popular Article)

1. Debabrata Das, 2018. Ecology Based Fisheries Modelling with Biotechnology. Educational Press of Write and Print Publication H-13, Bali Nagar, New Delhi-110 015.
2. Mitra, Guha and Chaudhuri. 1985. Studies in Botany, revised edition, Volume-II. Moulik Library, Kolkata. pp.653

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