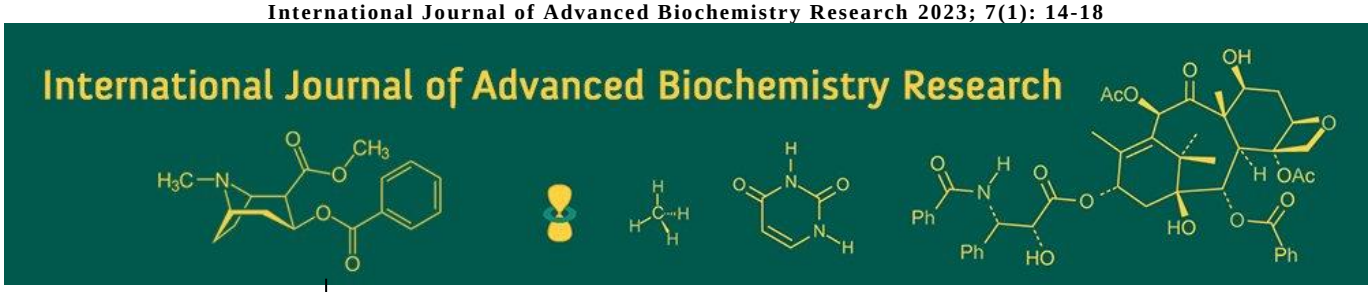

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The digitally measuring electrolytes and non-electrolytes may lead to dwarfness and tallness respectively in animal kingdom

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Abstract
Digital biochemistry may say higher electrolytes in environments cause dwarfness whereas non-electrolytes cause tallness. We found non-electrolytes Isoprene, Terpenoides, Flavonoides, Fats and Oils, Steroids, secondary sex hormones etc may lead to diseases-less and hence increases growth, vigour, tallness, strength and reproduction capacity etc. Higher electrolytes Total Dissolved Solids (TDS), Cation Exchange Capacity (CEC) found are negatively correlated with somatic and reproductive growths and whereas EC may do reverse to the mankind. The reasons behind this digital rules are that any excessive ionic metals may cause enzymatic hazards to animal cell biology to growth unlike plants. Instances found in fisheries digital records from an inland aquatic systems, are predominantly being used in decision making process for fisheries sustenance. In this documentary chapter applications are communicated on the basis of detection. Dissolved concentration in an aquatic medium available in analogue signal electronically can be measured to a digital signal and possibly through their recording may help in fisheries, at micro to extensive geographic scale. Aspects are described here for the natural sustenance in fishes *viz*. to facilitate natural breeding and on the other auspicious aspect of desired preventives in fish health hazards and this may be possible ideally, using the electronics and computers.

Keywords: Biology with higher CEC, TDS, diseases prone and dwarfness, biology with EC, non-electrolytes lead to tallness and vigour

Introduction
In Fisheries research Identifying suitable ecological waters pertaining to natural breeding is found to be a digital detection Process. As we know, fish prefers to swim within certain range water quality parameters, however, for natural breeding most inland fishes may need specific osmotic pressure as well. Let's say if this fact is true then how one can prove this. It is found that most fishes like to breed under the natural waters like in rivers. The reason may be that natural waters condition possibility of lower osmotic pressure owing to melting of ice and having lesser total dissolved solids (TDS) appropriate for most fishes. It is also found that environmental stress to the fishes is minimum during the monsoon period owing to higher dissolved oxygen (DO) value and natural fish breeding. The osmometer or devices attached to computer can detect suitable water for natural breeding for certain species on the basis of osmotic pressure. As this computer and electronics can read analogue signal to digital output. The variation of osmotic pressure, natural waters, natural fish breeding for sustainable fisheries can be well studied using computers and electronics. It is believed that in an aquatic system fishes may prefer certain osmotic pressures as well along with the certain water qualities. In inland fisheries every individual species like a suitable range of water qualities and also waters with certain osmotic pressure. Osmotic pressure should be at the lower end when the species naturally breeds. As natural breeding is important for existence of species, inland fisheries bio-diversity and overall the sustainable inland fisheries. Effects of thermal and osmotic stress on growth, osmoregulation is studied in sea cumcumber (Dong *et al*, 2008) [20]. In this study osmotic pressure of environment is treated as osmotic shock that determines the survibality of the species A. Japonicus. Effect of differential osmotic of the water environment may control in gene transfer of fish spermotozoa is studied (Kang *et al*, 1999) [17] of hypo osmotic solution for carp spermotozoa and when such osmotic pressure has been increased sperm cells become losen its fertility in the experimented environment. Effect of ammonia is found to be survival criteria of lobstar is found (Young Lai, 1991) [19].

Influence of acclimatisation, temperature and osmotic regulation is studied (Alexis *et al*, 1984) [18]. The apparent reason is body tissue dehydration. This research communication emphasises on why the natural fisheries has more importance over the cultural means when osmotic pressure is one of the criterions and needs to specific to the most species on natural sustainability issue. Digital biochemistry found that Biology with higher CEC, TDS, diseases prone and dwarfness, whereas Biology with EC, Non-electrolytes lead to Tallness and vigour.

Materials and Methods

In fisheries terminology, a total dissolved solid, TDS (Fig. 1), certainly related with osmotic pressure of waters, is an indicator to measure osmotic pressure of natural waters. With high TDS value prevailing higher osmotic pressure, experimentally when partitioning with distilled water, may not be liked by the most fish species during the time of spawning. As most species like to migrate in water having lower osmotic pressure (lower TDS) and this is possible in river streams, or during the period of dilution at the periods of monsoon rain. TDS may be an analogue signal that can be measured by analogue to digital devices like osmometer of a computer. If you are in fisheries you know possible external fertilization often takes place under an isotonic or hypotonic water environments and may not be under hypertonic water environment. Conversion of hypertonic solution to desired isotonic or hypotonic environmental medium takes place during the monsoon periods of upward migration of fishes. Only exception species in fisheries is prawn, not actually a fish, which migrate down-stream during the breeding period owing to get appropriate pH and DO environment along with the lower osmotic pressure. On the other side the cultural waters usually have higher osmotic pressures like more TDS may not be suitable most species to spawn. The methodology of measuring osmotic pressures of inland waters to identify suitable natural waters for fish breeding and sustainable inland or marine fisheries may be as simple as we can use**.** You know electronics and computers may be useful in fisheries in identifying water bodies suitable to natural breeding of many fish species of fresh waters systems. It has been found that most inland fish species may not breed under cultural water bodies as species may prefer to breed under the condition of natural system like in rivers, during the monsoon periods. Scientific facts behind such reasons are due to variation of osmotic pressure inserted by different water bodies. During the monsoon periods such osmotic pressure of water is comparatively lesser along with during such period environmental stress to fish species is minimised. Also that every species may requires a certain range of ecological conditions within which fishes may prefer to swim. Osmotic pressure whenever remains less, usually in rainy season, fish may breed. Today computers can be useful in measuring such specific osmotic pressure digitally of natural waters conditions, towards sustainable fisheries. Osmotic pressure of different fresh water is always less than sea water having osmotic pressure is quite high, and hence marine species usually search for waters having lower osmotic pressures at the confluences or in river mouths wherever existing are also detectable using the electronics devices.

Results and Discussion

It is believed that in aquatic systems fishes may prefer certain osmotic pressures as well along with the certain water qualities. In inland fisheries every individual species like a suitable range of water qualities and also waters with certain osmotic pressure. Osmotic pressure shold be at the lower end when the species naturally breeds. As natural breeding is important for existence of species, inland fisheries bio-diversity and overall the sustainable inland fisheries. Effects of thermal and osmotic stress on growth, osmoregulation is studied in sea cumcumber (Dong *et al*, 2008) [20]. In this study osmotic pressure of environment is treated as osmotic shock that determines the survibality of the species A. Japonicus. Effect of differential osmotic of the water environment may control in gene transfer of fish spermotozoa is studied (Kang *et al*, 1999) [17] of hypo osmotic solution for carp spermotozoa and when such osmotic pressure has been increased sperm cells become lose its fertility in the experimented environment. Effect of ammonia is found to be survival criteria of lobstar is found (YoungLai, 1991) [19]. Influence of aclimitasation, temperature and osmotic regulation is studied (Alexis *et al*, 1984) [18]. The apparent reason is body tissue dehydration. This reserach communication emphasises on why the natural fisheries has more importance over the cultural means when osmotic pressure is one of the criterions and needs to specific to the most species on natural sustainability issue.

Total dissolved solid is an indicator parameter to measure osmotic pressure of natural waters. With high TDS value prevailing higher osmotic pressure, experimentally when partitioning with distilled water, may not be liked by the most fish species during the time of spawning. As most species like to migrate in water having lower osmotic pressure (lower TDS) and this is possible in river streams, or during the period of dilution at the periods of monsoon rain. TDS may be an analouge signal that can be measured by analouge to digital devices like osmometer of a computer. Possible external fertilization often takes place under an isotonic or hypotonic water environments and may not be under hypertonic water environment. Conversion of hypertonic solution to desired isotonic or hypotonic environmental medium takes place during the monsoon periods of upward migration of fishes. Only exception species in fisheries is prawn, not actually a fish, which migrate down-stream during the breeding period owing to get appropiate pH environment along with the lower osmotic pressure. On the other side the cultural waters usually have higher osmotic pressures like more TDS may not be suitable most species to spawn. Biological reasons are due to protect and adapting more soft cells *viz*. egg cels and sperm cells while in external medium of low osmotic pressure waters medium. Often fish is the indicator of pollution and species can detect osmotic pressure of such environmental waters. In recent time osmometer is such a device that helps to measure osmotic pressure of natural waters attached to the computer, or separately digitally. For individual species, recording of osmotic pressure may be done where actually the particular species breeds naturally, and accordingly such can be maintained to other waters when we expect the species to prevail.

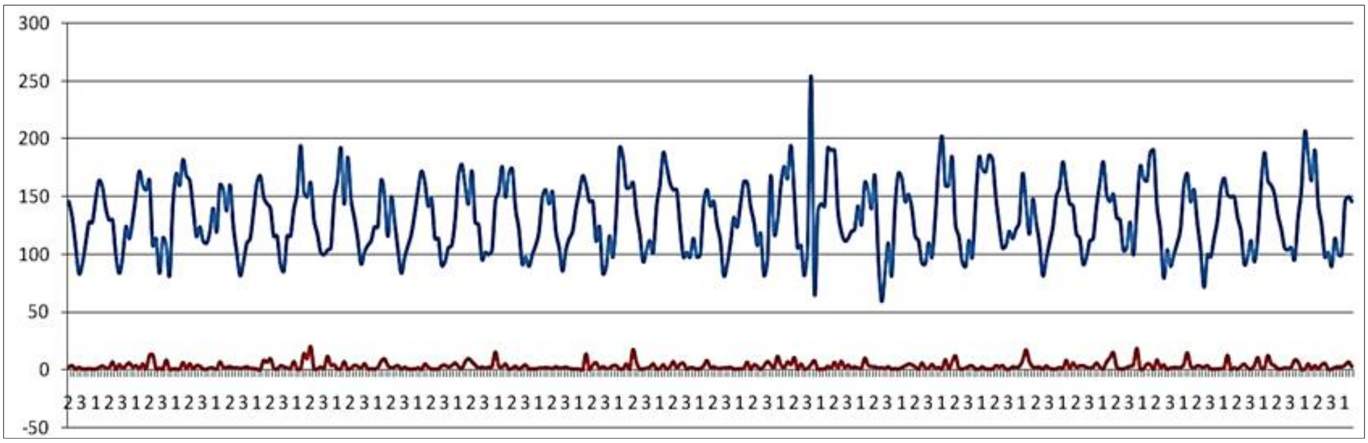

Fig 1: Seasonal (1: winter, 2: pre-monsion, 3: monsoon) variation of Total Dissolved Solid (TDS) in ppm, at the lower stretch of the river Ganges and negatively correlated with fecundity digital biochemistry found that higher CEC, TDS, diseases prone and dwarfness whereas EC, Non-electrolytes lead to Tallness and vigour.

Today happenings of computer and electronics are immense and being fruitful in fisheries in identifying water bodies suitable to natural breeding of many fish species of fresh waters systems. It has been found that most inland fish species may not breed under cultural water bodies as species may prefer to breed under the condition of natural system like in rivers, during the monsoon periods. Scientific facts behind such reasons are due to variation of osmotic pressure inserted by different water bodies. During the monsoon periods such osmotic pressure of water is comparatively lesser along with during such period environmental stress to fish species is minimised. Also that every species may requires a certain range of ecological conditions within which fishes may prefer to swim. Osmotic pressure whenever remains less, usually in rainy season, fish may breed. Today computers can be useful in measuring such specific osmotic pressure digitally of natural waters conditions, towards sustainable fisheries. Osmotic pressure of different fresh water is always less than sea water having osmotic pressure hence marine species may also may search lower osmotic pressure at the river mouths or inside inland, fishes to breed may be found up to a limit 250 ppm TDS of osmotic pressure that can be measurable. In scientific inland fisheries, osmotic pressures of ecological waters is considered to be as one of the most critical parameters in fish and fisheries, particularly when natural breeding of aquatic species are often concerned. As communicated most inland fish species can naturally breed within below 150 ppm of osmotic pressure. It has been found that sophisticated IMC can breed in the osmotic pressure below 100 ppm. In recent days one can apply TDS meter or osmo-meter or analogue to digital computer are to detect and identify such favourable data from the fields to add species biodiversity. Controlling osmotic pressure when become tedious on a natural breeding process of species we can also suggest algorithmic model in controlling osmotic pressures. Using Ashes is to maintain such desirable limits of osmotic pressure, if needed. In extreme situation, beyond control, when this instruments show a high osmotic pressure a crab (or mud crab), mud-eel may be the most suitable species to grow and breed naturally. It is reported in this communication that mud-crabs can be grown and naturally breed even up to 1200 ppm of osmotic pressures situations whereas mud eel can tolerate an osmotic pressure of 2000 ppm. Hence, starting from natural water to waste water management, computer and electronics devices may prove suitable to guide in environmental correction, restoration or selection a species under the both, natural or controlled. This devices could be helpful when human observations are become biased and also when inland aquatic species seek for a unique environment and ecological regime for their survival and future existence. Other similar bio-instrumental applications in fisheries using the similar devices. Preventive measure of inland fish diseases using low concentrated cow-dung medium as detected by TDS meter, osmometer computers. As we know the best bio-reactors in the world is the bovine intestine and henceforth, cow-dung be also valuable in fisheries, obvious in certain concentrations as digitally detectable by electronics devices. Auspicious cow-dung containing Humic acids help to take as preventive measure of some fish diseases of inland waters is communicated in this research communication. Humic acids having lower pH may react with cationic elements of most pathogens. However extent and intensity may be unknown. Addition of cow-dung detectable by computers and electronics (a Digital TDS meter) can be helpful in preventing diseases of small to medium water bodies of fisheries importance or in fish stocks, that we can be affordable in inland fisheries. Preventive measure of fish disease, The Cow-dung in fisheries, Total dissolved solid, TDS meter, Computer and electronics. Cow-dung is proved glorious in agriculture and in fisheries as well at various ways. If you are serious cow-dung concentration detection may be important in fisheries and being revealed assuming the medium is manually being used since the Vedic era of Indian tradition. Not using any such devices, may lead to a scientific misuse of resources. The cow-dung, partial to moderately dissolved in experimental water of fisheries importance with a minute concentration (< 50 ppm) measurable by TDS meter may be good in taking preventive measure of fish diseases. This concentration can further detectable by analogue to digital computer. In such situation the occurrence of fish diseases may become nil. Reason is that raw cow-dung contains namely types of humic acids (Fig. 2), that possibly destroys the cell wall or cellular structure of fish pathogen. This low concentrated cow-dung medium does not make any harm to the intestinal cellulose digesting microbes i.e. bacteria in their intestinal vessel for digestion process. At the same time this low concentrated (< 50 ppm) cow-dung medium of waters may also help in phyto and zoo plankton production. Application of TDS meter, osmometer, computers are to detect total dissolved

cow-dung as total dissolved solid in analogue to digital mode. This may be having some academic and research interests in inland fisheries as well. As this experiment was conducted on tropical fish species like *Tilapia mossambicus*, major IMC and *Macrobrachium rosenbergii*, *N chitala* and could become good for all the tropical fish species as target is pathogens. This cow-dung medium may also become good in controlling fish diseases in the other tropical waters. In connection to this scientific communication experiment found that *Heteropteneus fossilis* can survive disease free for a yearlong time in a highly concentrated (1000 ppm) cow-dung medium In tropical region prevailed fish pathogens are Bacteria (18), Protozoa (6), Virus (34), Fungus (91), Helminth (5), Crustacean (4), EUS A total of 158. Are being reported (Das and Gupta, 2007). In situation cow-dung may be the best preventive measure of pathogens other than fungal diseases. In eco-technology mode however most of the fungal diseases of fishes however can be prevented naturally by base elements *viz* banana pseudo-stem as it contains Calcium (Ca++) or cationic analysers. Humic acids may react on Ca, Mg, Zn of pathogenic cell wall and also bacterial flagella comprising base substance. Some bacterial cell wall are comprising weak fatty acids get replaced by lowering pH when cow-dung is added in the medium. The C/N ratio of Humic acids of cow-dung is 12.3 to 17.3, Which, otherwise, hamper the microbial growth. As optimum organic growth media for most pathogens usually within the range of 20-30.

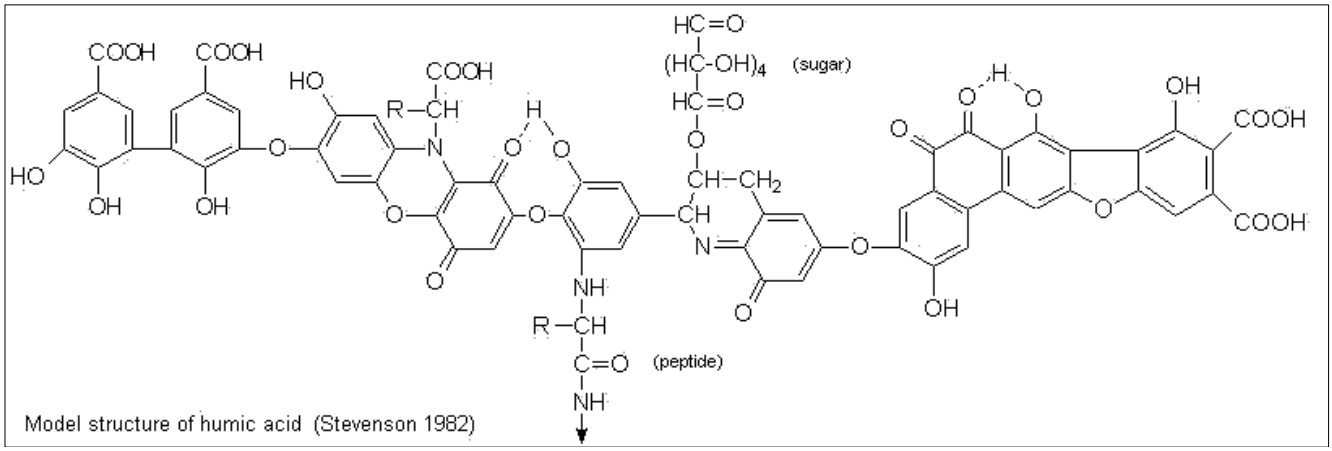

Fig 2: Biochemical structure Humic acid present in raw cow-dung with having TDS (below 50 ppm) detectable may be helpful in Fisheries in controlling diseases to growths.

Conclusion

Earlier and present research communications found and established that higher CEC, TDS, diseases prone and dwarfness whereas a higher EC, Non-electrolytes lead to Tallness and vigour. Digital biochemistry may be useful to detect natural waters suitable for the natural breeding of all aquatic species. As every species require an ideal osmotic pressure measurable by the devices. Even in the cultural method of fish breeding such is maintained by adding distilled water or fresh water after the induction process so that species may breed. However, we prefer natural processes since through cultural means we can not think every individual species to handle cultural means. Devices may be also useful in detecting disease free water environments by some preventive measure when we consider to use of raw cow dung. In fisheries research this preventive measures may be economical in fisheries and sustainability for plankton in terms of zooplankton and phytoplankton productivity at the same raw cow-dung in some extent may be used as fish feed hence addition is always non-harmful to the fisheries however, here use of computers and electronics is to guide us in the detection process of aquatic medium of fisheries. In open water fisheries addition of cow-dung may not be an easy task. The way we can prevent is in fish stocks. This may be advisable to fishermen for its affordability, and environment friendly when in a lower concentration.

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