

## Projects Studies Undertaken

1. Bio-monitoring of River Ganga and its tributaries from Haridwar to Patna.
2. Bio-monitoring of River Yamuna from Panipat to Prayagraj.

## Publications

### **A. Research/ Review Papers:**

1. Sanjeev Agrawal, Jaya Sharma and Annu Goel. 2019. Taxonomic Richness of Benthic Macro-Invertebrates in Uttarakhand Stretch of River Ganga, India. *Applied Biological Research*.21(3): 235-244.
2. Annu Goel and Jaya Sharma. Bio-Monitoring of Surface Waters Using Macro-Zoobenthos as Indicator Organisms.2018. *Indian Research Communication*. Vol. 12(1): 07-09.
3. Annu Goel, Jaya Sharma, Ishaq Ahmad, Firoz Ahmad and Pratima Akolkar. 2016. Determination of Threshold Odor Limit of formalin for occupational health in laboratory. *Indian Journal of Medical and Health Sciences*. Vol 3(02): 99-102.

### **B. Books:**

1. Pratima Akolkar, Jaya Sharma, Ishaq Ahmad, Firoz Ahmad, Annu Goel.2017. Biological Health of River Ganga. PR Division, CPCB, Delhi.
2. Biological Indicators of water quality in River Ganga. 2017. PR Division, CPCB, Delhi.
3. Pratima Akolkar, Jaya Sharma, Annu Goel, Ishaq Ahmad and Firoz Ahmad. 2017. Benthic macro-invertebrates of river Ganga. PR Division, CPCB, Delhi.

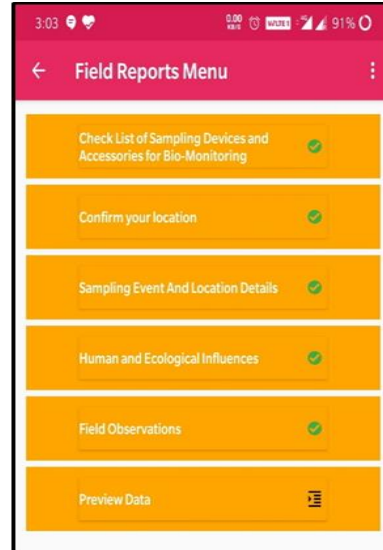
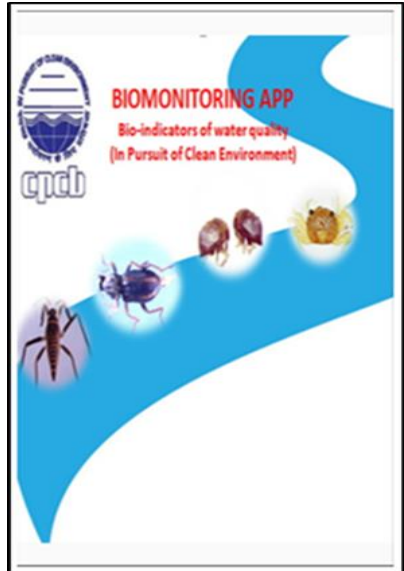
### **C. Abstract:**

1. Bio-monitoring / Bio-mapping of River. 2015-16. Ganga Samachar, CPCB ENVIS GANGA Bulletin. Issue 2.

## Biomonitoring App & Web-portal

Bioscience laboratory is using a mobile application named as “**Bio-monitoring App** and **Web portal** for digitalization of bio-monitoring field and laboratory analysis data and generation of bio-assessment reports in various formats i.e. in graphical, tabular and in map formats. Biomonitoring App has provision for recording sampling location details automatically and manually both and to store pictures of sampling location. Web-portal automatically calculates the value for saprobic and diversity scores. After calculation of data, a brief report about Biological water quality status of the sampling location is generated.

## Images of Biomonitoring App:



## Images of Web-portal:

