

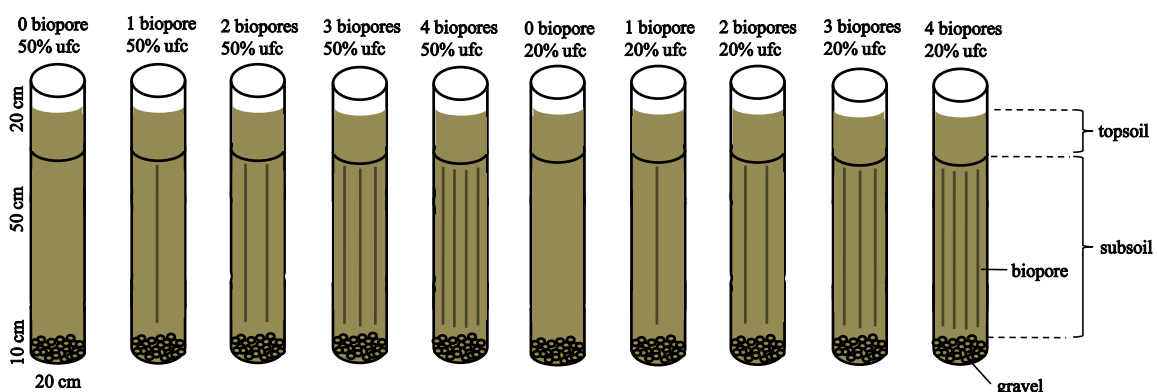
## Masterstudent wanted for study project about: 'Contribution of biopores to water use efficiency of wheat and potato'!

At division Crop Science (Dahlem)

2018 was one of the driest and hottest years since weather records began in Germany, leading to massive crop losses. Also in the following years, extreme weather events are expected as consequences of climate change. Therefore, strategies are urgently needed to cope better with future extreme weather events such as drought stress. Studies have shown that biopores can contribute to improved access of plant roots to water and nutrients in deeper soil layers. Biopores (bottom right) are pores in the upper and lower soil formed by deep-rooting plants or soil organisms such as earthworms. However, many factors that affect the successful access of roots of crops to deeper soil layers via biopores are unclear. In this project the influence of biopore density and different soil moisture profiles on the water- as well as on the nutrient-acquisition of wheat and potato will be investigated. This will be done with help of a special pot experiment, a so-called microcosm study (figure below).



Biopore (50-80 cm soil depth).  
*Kautz Renew Agr Food Syst*



Schematic scheme of microcosm study. ufc = usable field capacity.

If you are interested please contact Mirjam Koch: [mirjam.t.koch@hu-berlin.de](mailto:mirjam.t.koch@hu-berlin.de).

We would be happy to welcome you in our team!