

ABSTRACT

This investigation focuses on the bio-fabrication of SO-BN(NCs) utilizing *Spinacia oleracea* as reductant for improved degradative efficiency towards polyfluoroalkylated substances in Ravi river aquatic sample. Spinach is a rich source of nutrients, elements and vitamins. Liston *et al.* (1990) described the most common method of preserving "information content" of living plants that could be still use as dried and pressed plant specimens, a practice that dates back to the Italian Renaissance. Material maintained for cytological, chemical, or anatomical investigation is often added to the standard specimen in a modern herbarium. An increasing amount of molecular data is used in plant systematics, hence methods for storing material that facilitate the recovery of nucleic acids and isozymes are required. For the most part, it has been believed that plants must be quickly transported to the lab on ice or that plant tissues must be frozen and kept in liquid nitrogen until they can be returned. Both strategies can be used with good success when the plants being studied are nearby and in conveniently accessible places. They have also been employed to collect samples for molecular analysis in more isolated locations, but the costs and logistics are prohibitive in these circumstances. Furthermore, employing ice or liquid nitrogen storage makes it hard to create large-scale "floristic" groupings. Having an alternative to these methods would be great. Fresh, frozen, or dried plant tissues were the only ones that yielded high-quality genomic DNA yields in a recent evaluation of 27 treatments for plant specimens.