## IMPROVING AGRICULTURAL PRODUCTIVITY WITH RADIATION PROCESSED NATURAL POLYMERS



Through the power of irradiation to break and create chemical bonds, the natural polymer cassava starch is used to make super water absorbents (SWA), 1kg of which can absorb and hold 200 litres of water and release it slowly over time. Placed in the soil near plants' roots, SWA can be used where there is little rain or frequent drought. After 9 months the crystals, which resemble sugar crystals, completely disintegrate, leaving no residue.

Text and Photo: Sasha Henriques, IAEA Division of Public Information