The simplest definition of artificial seed can be such as: encapsulated somatic embryos which functionally mimic seeds and can develop into seedlings under sterile conditions. Parts of a typical synthetic seed. A typical synthetic seed has the following parts such as: (a) Plant propagule (somatic embryo or shoot bud) somatic embryos are bipolar structures with both apical and basal meristematic regions, which are capable of forming shoot and root, respectively. (b) Matrix Not every plant grows from a seed. Some plants, like ferns and mosses, grow from spores. Other plants use asexual vegetative reproduction and grow new plants from rhizomes or tubers. We can also use techniques like grafting or take cuttings to make new plants. Spores are different to seeds. They do not contain plant embryos or food stores. When the sporangia break open, the spores are released and dispersed by the wind. Its seeds â€“ the largest and heaviest in the world â€“ were once believed to grow on trees beneath the waves of the Indian Ocean, and to hold great healing powers. Even when it later turned out that the palm grows on dry land, new folklore emerged: To produce this seed, the male and female plants embrace each other on a stormy night, or so a local story goes. Now the science behind the charismatic palmâ€™s seeds is proving to be just as fascinating. So how does a plant that grows in poor quality soil on just two islands produce record-breaking seeds that reach half a metre in diameter and can weigh in at around 25 kilograms? The coco de mer palm hasnâ€™t yielded all of its secrets yet, though. Exactly how the female flowers â€“ the largest of any palm â€“ are pollinated remains a mystery.