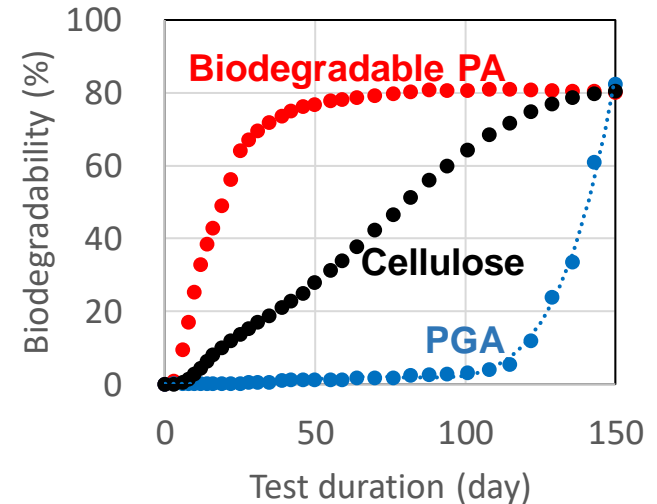


Application of biodegradable polymers towards marine plastic pollution have been investigated. However, there are still remain many problems, for example, the degradation of one of the polymers are quite low in the ocean.

Biodegradable polyamide (PA) and polyglycolic acid (PGA) degrade in sea water and they have extensive high mechanical strength associated with high concentration of amide group or ester group.

Degradation product of biodegradable PA is amino acid (AA) and that of PGA is glycolic acid (GA). AA and GA exist in natural environments so the impact of them to marine environment is assumed very small. In this project, we develop strong and degradable biopolymers based on PA and PGA for fishing gears.

Biodegradation in sea water (ISO19679)



Degradation of PGA ball

