

## Toyota Boshoku Develops New Automobile Interior Parts Utilizing Plant-based Kenaf Material

Kariya (Japan) 9th February 2012 - Toyota Boshoku Corporation (President Shuhei Toyoda) has developed even lighter weight door trim and seat back board base material based on our existing technology that utilizes Kenaf in an aim to improve the fuel economy and also to reduce the amount of CO<sub>2</sub> emissions by reducing the weight of vehicles. These interior parts were adopted on the new model Lexus GS sold by Toyota Motor Corporation starting in January.

An additive was combined with the polypropylene (hereinafter referred to as “PP”) raw material to improve its compatibility with the Kenaf fibers. The improvement of the bond strength between the PP and the Kenaf resulted in the development of door trim base material and seat back board base material that was 20% lighter in weight compared to the conventional parts.

The molding process for the base material was also improved and a simultaneous plastic part molding technique was developed that performs the press molding of the base material at the same time as the injection molding of the plastic structure for the back side. This was done in an effort to improve the production efficiency and to reduce the size and weight of the back side structure.

The Toyota Boshoku group began examining the use of plants in our corporate products since the 1990s in an aim to realize a society that is friendly to the Earth's environment. The plant that best represents the fruit of our efforts is Kenaf because it grows quickly and has strong CO<sub>2</sub> absorption capabilities. Starting with the commercialization of door trim that utilized Kenaf material in 2000, we have gradually expanded the application of Kenaf material in more vehicle models and components. Currently, we are working in Indonesia to commercialize everything from the development of the seeds and cultivation, to the production of Kenaf fiber boards. In the future we aim to further expand the application of plant-based materials, while also continuing to build even more appealing vehicles.



Door trim base material adopted on the Lexus GS