Mean, green machine - future of motor racing

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The WorldFirst Formula 3 racing car drives down the straight of a test track at Bruntingthorpe near Lutterworth, in Leicestershire. The steering wheel is made from a polymer derived from carrots and other root vegetables while the seat is flax fibre shell, soy bean oil foam and recycled polyester fabric.

Cars powered by chocolate, steered by carrots with drivers sitting on soybean oil foam seats - it's motor racing's cheap, cheerful and environmentally-friendly series of the future.

While Formula One stables have not hesitated to spend millions of dollars on the latest thing in ultra-high technology to gift the likes of Lewis Hamilton and Jenson Button a few milliseconds per circuit, researchers in Britain envisage an organic future for motor racing.

The biodiesel WorldFirst F3 car, designed as a riposte to Formula One's

"carbon excesses," is the brainchild of researchers at the Warwick Innovative Manufacturing Research Centre, who developed the prototype for just 220,000 dollars.

The team, led by researcher James Meredith and investigators Dr Kerry Kirwan and Dr Steve Maggs, say they are determined to show the racing fraternity in credit-crunched times that "it is possible to build a competitive racing car using environmentally sustainable components".

Some of those components come from the unlikeliest of places.

"At the moment we use all sorts of waste to turn in to biodiesel - including excess fat trimmed from operations," Meredith explains.

Green elements are "creeping out of the woodwork" all the time, Meredith told AFP, as the motor industry mulls everything from electric vehicles, hybrids and hydrogen-powered cars but sponsorship is not proving easy to come by despite, or even because of, the current trials and tribulations of the car industry.

"It's been difficult to get people involved but we're trying to get companies expertise and keep costs down," says Meredith.

"But we have the advantage now of being quite high-profile. We have had chats about sponsorship but there are no direct offers of cash yet.

"We hope to get further funding on the basis of a number of future research grant applications."

The WorldFirst team insist there there is no need to compromise on performance while at the same time "effectively managing the planet's resources."

The car, based on a 2005 Lola B05/30 body, has a biodiesel engine which runs on vegetable oil and fuel from waste chocolate.

Green credentials are further enhanced by a radiator coated in an emission-destroying catalyst, reducing the spread of ground-level ozone.

Meredith says it is hard to quantify in absolute terms how green the car is, given the dependence on variability and sustainability of supply of the green produce.

"We have set this up with the intention of making a racing car out of green materials which is competitive," Meredith told AFP, adding some elements are already in mass production.

These include the soyabean seat, though he accepts that "many green materials are not as good as carbon fibre materials" because of their additional weight.

"Certainly no F1 team is going to use them unless you legislate for their use," he opined.

Nonetheless, with initial interest stirred by the car's public appearance - later this month it will hit the track at Britain's Goodwood Festival of Speed - and the fact the vehicle is 95 percent biodegradable the research team are now out to show the world that a chocolate-and-carrots-flavoured future has arrived.