Yeast key to gasohol

A University of Saskatchewan scientist is working on a new type of yeast that could be the key to producing gasohol economically.

The yeast, being developed by microbiologist Mike Ingledew, will reduce the present two-stage process of producing alcohol by fermentation to one. Conventional brewing relies on the action of plant or bacterial enzymes to break down the starch in grain to sugars like glucose and maltose. (In beer making the enzymes are in the malt.) The yeast ferments the sugars to alcohol.

Ingledew first found a natural yeast strain that could break down starch to sugar then he used genetic engineering techniques to fuse those yeast cells to cells of a strain that converts sugar to alcohol. The hybrids convert grain to alcohol in one step. The process is expected to reduce the cost of alcohol, making use of the alcohol-gasoline mixture, known as gasohol, more economical.

Ingledew is working to make the hybrid yeast more stable so that it will retain its characteristics through many generations. In addition, the researcher says that the masses of yeast cells produced during this fermentation process are up to 50 per cent protein and could be used to supplement both animal and human foods.

Rare New Brunswick stamp sold

An anonymous Canadian collector paid \$130,000 (U.S.) for a unique New Brunswick cover of 1853 at a recent auction of rare Canadian stamps held in New York.

Gloria DeMent, agent for J.N. Sisson Inc. of Toronto, bought the cover, described as the most significant piece of New Brunswick postal history in existence, for a Canadian client she said she could not name.

The day-long auction was the first in the United States by the newly formed Stanley Gibbons Auction Galleries Incorporated, a subsidiary of Stanley Gibbons of London, the world's oldest and largest philatelic company.

The highlight of the auction was the spirited bidding of several collectors for the New Brunswick cover sent from Saint John to Hungary in 1853.

The cover features the only known

strip of three of the dull mauve oneshilling stamp of 1851. The issue was the first in New Brunswick's short history as a separate postal entity in the years before Confederation in 1867.

The cover was mailed from Saint John on August 30, 1853. Endorsed "via New York", the letter went to St. Andrews, New Brunswick, *en route* to New York. Upon crossing the Atlantic, it reached Liverpool, where it received a tombstone-shaped cancellation.

The envelope continued to London and then to Calais, France, where a September 15, 1853, transit date stamp was affixed. Then it was dispatched to Hungary on the final leg of its three-week journey, arriving in Pesth – Budapest – on September 21, 1853.

Pair break world driving record

Two Canadians have succeeded in beating the Guinness Book of World Record's best time for driving around the world.

Ken Langley and Garry Sowerby left Toronto in their station wagon September 6. The pair pulled up in front of the city's CN tower 75 days and 42,668 kilometres later beating the Guinness record by 26 days. During their trip they experienced riots, strikes, avalanches, collapsed bridges, earthquake tremors and inflated gas prices.

"We're tired and incredibly happy to be back," said Langley.

"We did the trip for the adventure and personal challenge - it was a test of man and machine against time and the elements. We had a look at the world and now we're going to specialize," he said.

One person drives

The rules stipulate the vehicle must follow the circumference of the earth, touching at least four continents and both hemispheres. Only one person can drive.

Sowerby, 30, an engineer from Moncton, New Brunswick, drove while 29-yearold Langley, a law graduate and native of Sydney, Nova Scotia, was navigator, tape selector, information officer and project co-ordinator.

The duo spent just over a year and \$100,000 in Toronto getting ready for the trip. Another \$200,000 in expenses was covered by their sponsors, which include Volvo, Shell Canada Limited, Canadian Tire, Champion and the newspaper, Toronto Sun.

The route took them west across the continents of North America, Australia, Asia and Europe. They flew from Los Angeles to Australia, and from London to Houston, Texas, transporting the car in the aircrafts' baggage compartments. The two drove an average of 15 hours a day.

The men intend to stay out of cars for a while and concentrate on writing a book of their adventures.

Scientists witness whale birth

Canadian scientists and divers recently witnessed the birth of a baby killer whale off Vancouver Island. They are believed to be the first to make such a sighting.

The birth occurred north of the Sophia Islands, in the strait about halfway between Seyward and Port McNeill on Vancouver Island. Killer whales congregate there from June to October to dive, play, leap in the air, mate, feed and roll on sheltered green-pebbled beaches.

"There have been births among killer whales in captivity but no one, to my knowledge, has ever seen a birth in the wild," said Dr. Michael Bigg, head of marine mammal research and management for the federal fisheries and environment Pacific biological station in Nanaimo.

Ten people witnessed the birth: Jim Borrowman of the Robson Bight Preservation Committee and three fellow-divers from the Top Island Aquanauts Society, British Columbia fish and wildlife biologist Bill Harrower, three journalists and two Vancouver architects.

Graduate student Jeff Jacobsen, stationed in a small craft at the mouth of a cove, motioned for silence as the birth began.

Flipping in the shallows, a tiny blackand-white killer whale jacknifed on its back. It appeared to be in distress, out of reach in the shallows and unable to breathe.

Then a whale, perhaps its mother, slipped its pectoral fin around the newborn's body, buoying it up and carrying it out to deep water. It guided the infant's head and blowhole to the surface in a simple lesson on life: Breathe.

Whales surged around the infant, submerging and surfacing. Swimming 100 metres (380 feet) out into the open straits, the whales broke into play, tails slapping and vocalizing audibly.