

RANDOM SAMPLES

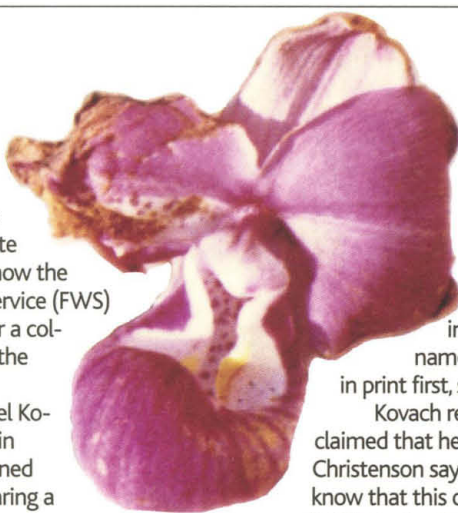
edited by CONSTANCE HOLDEN

The orchid world was thrilled in June to learn of the discovery of a glamorous new species that grows in the remote highlands of Peru. But now the U.S. Fish and Wildlife Service (FWS) is investigating whether a collector illegally brought the specimen into the U.S.

In early June, Michael Kovach, an orchid grower in Goldvein, Virginia, returned from northern Peru bearing a potted bloom he had bought near the "orchid city" of Moyobamba. He brought it to the Marie Selby Botanical Gardens in Sarasota, Florida, where experts identified it as a huge and glorious member of the genus *Phragmipedium*, known as lady slipper orchids because of their distinctive pouch. Selby raced the plant into print, naming it *Phragmipedium kovachii* after Kovach, in a special 17 June issue of its journal *Selbyana*.

The only hitch: Slipper orchids are on Appendix I of CITES, the endangered species convention, which means they are in great jeopardy and shouldn't be taken from their native lands.

Peruvian officials have reportedly complained,



Disputed lady slipper.

and some orchid fans, including Sarasota taxonomist Eric Christenson, have cried foul. Christenson, a former director of Selby's micro-propagation lab, says he learned about the flower last May from contacts in Peru and published it in the journal *Orchids* in July, with the name *Peruvianum*. However, Kovach got in print first, so his stands as the official name.

Kovach refused to talk with *Science* but has claimed that he had the proper documents. But Christenson says no documentation was needed to know that this orchid is "on top of the [endangered] list." Bringing it to Selby, he says, was "like showing up at a museum with an elephant tusk with fresh blood dripping off the end."

FWS officials won't comment but did say that permits for highly endangered plants are typically not given to commercial growers like Kovach. Wesley

Orchid Fracas

Higgins, Selby's director of systematics, says that Kovach faxed some documentation to the museum but won't say what it was.

Kovach and Selby are now awaiting the verdict of FWS. (Maximum penalties for violating CITES are a \$100,000 fine or a year in jail.) Meanwhile, orchid growers are hurrying to commercialize what some call the most spectacular orchid find of the century.

Lasker Awards

Two cell biologists have won this year's Lasker award for basic medical research: James Rothman of New York City's Sloan-Kettering Institute, and Randy Schekman, a Howard Hughes investigator at the University of California, Berkeley. Two emeritus professors won the clinical research award, for developing kidney dialysis: Willem J. Kolff of the University of Utah, Salt Lake City, and Belding H. Scribner of the University of Washington, Seattle.

Molecular biologist James E. Darnell Jr. of Rockefeller University won a special achievement award for opening up the fields of RNA processing and cytokine signaling, as well as for fostering the development of other scientists.

Inaugurating what may be the first interdisciplinary research think tank in mainland China, scientists from around the world this month celebrated the opening of the Shanghai Institute of Advanced Studies (SIAS) with a seminar examining Chinese science and technology.

"The Chinese government has almost ignored basic research in favor of applied work," said neuroscientist Yi Rao of Washington University in St. Louis, one of SIAS's two co-directors. The institute, a project of the Chinese Academy of Sciences with financial support from the Max Planck Institute and the Volkswagenstiftung in Germany, aims to remedy the imbalance with an interdisciplinary approach modeled after its near-namesake in Princeton, New Jersey.

Chinese Think Tank

SIAS hopes such an atmosphere will also attract Chinese-born scientists now working abroad. According to Cao Cong of the National University of Singapore, about 380,000 Chinese studied abroad between 1978 and 1998, and only a third returned; of those studying in the United States, only about 10% of new Ph.D.s intend to go home. To lure more back, says SIAS co-director Uli Schwartz, a biologist at the Max Planck Institute for Developmental Biology in Tübingen, they will have to be accorded Western-style academic freedoms—especially the freedom to cross disciplinary boundaries.

The conference agenda eschewed the typical Chinese focus on one topic by covering issues from genetic engineering to traditional Chinese medicine. Schwartz says he was especially pleased to see Chinese students asking pointed questions of speakers—"something you hardly ever see" in China.

Navigating deftly through a giant chemical model of DNA, Iona Sole, a sixth grader of the future, can feel the pull of intramolecular forces and the surfaces of atoms as she swoops through space. Iona's "adventure learning" odyssey began when she entered the dome-shaped Tangitrek, wearing a haptic exoskeleton that allows her to interact with the machine by touch, a gimbaled harness, and an autostereoscopic display. The DNA tour is part of Iona's project on the theoretical genetics of creating a winged horse. Next, she journeys to ancient Greece, where she talks with local Synthespians. (Translation from Greek can be turned on as needed.)

Iona's project can't yet be seen in any classroom. She was created by Massachusetts computer graphics wizard Diana Walczak, as the star of one scenario for future education created for the U.S. government by 14 educators, artists,



Iona witnesses birth of baby dino as she learns how birds evolved.

and engineers. Their report, *2020 Visions*, was presented last week at the U.S. Department of Commerce, which sponsored it along with the Department of Education and the National

Education Dreams for 2020

Science Foundation. Commerce spokesperson Marjorie Weisskohl says the report, online at www.ta.doc.gov/Reports.htm#2020, aims to spark the imagination of educators, technologists, and businesspeople.