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Basmati Rice PatentThe (Merchant) Prince and the (Punjabi) Paupers

A U.S. rice patent has the potential to make Europe's Hans-Adam II "heir apparent" to South Asia's Basmati rice and its famous name. The Liechtenstein Prince's dreams of empire may be decided in a Texas law court.

Last September, RiceTec, Inc., an imaginative little company hailing from the tiny town of Alvin, Texas (barely a speed-bump on the road between Houston and Galveston), won U.S. patent #5,663,484 claiming the breeding of Asia's famous aromatic "Basmati" rice. The patent covers Basmati grown anywhere in the Western Hemisphere. RiceTec also slapped its brand on any breeding crosses involving 22 farmer-bred Basmati varieties from Pakistan - and, effectively - on any blending of Pakistani or Indian Basmati strains with the company's other proprietary seeds. Adding insult to injury, RiceTec's varieties appear to be nothing more than "derivatives" of famous Green Revolution rices developed decades earlier by the International Rice Research Institute (IRRI) in the Philippines. When news of the patent broke, the Government of India declared war, arguing that the patent jeopardizes an annual Basmati export market of Rs 1200 crores (approx. U.S.\$277 million) and threatens the livelihood of thousands of Punjabi farmers.

The Punjab's Basmati

Meaning either "Queen of Fragrance" or "Fragrant earth", Basmati is a slender, aromatic long-grain rice with an often nutty taste and an unusually delicate texture that grows best in the shadows of the Himalayas. For countless generations, Punjabi farm families in the region have nurtured the fragrant seeds, improving the yield and disease resistance of the fickle plant. The Punjab spans areas of both India and Pakistan. Basmati originated in this region as well as in the contested lands of Kashmir.

The Rice Emperor: Industry observers and diplomats expect the impending patent battle - and the company's claim to the right to use the "Basmati" name - will turn Alvin, Texas into another "Alamo" (referring to the 1836 'siege of the Alamo' when Mexican troops overran the old Spanish fortress.) But an "Alamo" in Alvin would be misplaced. Wedged between Switzerland and Austria a few thousand miles east lies the mountain principality of Liechtenstein - with fewer citizens than Alvin. However, Liechtenstein's reigning Prince Hans-Adam II, may harbour latent dreams of empire. The Prince is the chairman of the RiceTec Group. RiceTec AG of Liechtenstein has two subsidiaries - RiceTec Inc of Alvin, Texas fame and RiceSelect Ltd. of Britain. The Alvin rice breeding enterprise employs about 100 people and has a turnover of at least \$10 million. There is no information on the total value of the entire group.

Though it may appear small, the RiceTec Group has colonized some of the South's most valuable rice and durum wheat (used in pasta). Brits and Americans will know the company best through its unique "dual branding" strategy. RiceTec is paying supermarkets \$75-\$100 a month for specialty displays of its RiceSelect "Chef's Originals" rice and recipe boxes. The company has convinced some of the world's most famous chefs to create new rice recipes and the advertising combines both the company brand and that of the chef. Sales are booming. "Chef's Originals" can contain some of the Prince's other colonized subjects like Basmati rice or "Jasmati" brand rice described by the industry as "the Texas-grown copy of Jasmine rice from Thailand". The Alvin subsidiary also markets a couscous it calls "durum wheat Moroccan pasta". But Hans-Adam II's flagship initiative is the colonization of Basmati rice by commandeering the famous name, and patenting the germplasm.

The Prince's Paddy Patent

The patent move was expected. RiceTec's application had been filed in mid-1994 and rumour had it that the company would make a bid to monopolize Basmati. Indeed, RiceTec's incursions into the Asian Sub-continent date back to the mid-eighties when its predecessor company "Farms of Texas" took out a U.S. Plant Variety Protection certificate (a form of patent for plants) on rice variety CB-801. A U.S. government report a year later labeled the variety "an IR-8 derivative." IR-8 was IRRI's original Green Revolution super-rice. By 1995, RiceTec was seeking yet another certificate for BAS-867 and still others were in the works. Pat Roy Mooney, the Executive Director of the Canadian-based Rural Advancement Foundation International (RAFI) a small rural advocacy organization, comments that, "RiceTec is capitalizing on the genius of others. I'm sure farmers in the Punjab would be happier if the company paid each of them \$75-\$100 a month to use their good name and germplasm."

The "Champagne" of Rice

International outrage concerning the patent arises on several fronts. First, many are incensed that a company can usurp the name "Basmati" with impunity. Basmati rice is as much a part of the Punjab as "champagne" or "cognac" are to the regions bearing their names in France. In recognition of the fundamental contribution of vine-breeders in those regions, the world has decreed that similar sparkling wines and brandies from other places cannot bear the name of the region from whence the innovations came. Nothing prevents Californians from creating excellent sparkling wines - just not "champagne" wines. Many regard it as a matter of North/South racism that white-coated scientists feel able to commandeer the "Basmati" name. In 1995, in fact, Indian exporters and the New Delhi Government joined forces to challenge RiceTec's claim that its varieties were "Indian-style Basmati". India has so far succeeded at least in the UK.

Farmers' Rights

In its defence, RiceTec argues that the term Basmati - and the seeds - have spread from the Punjab to Thailand and the Philippines and that India and Pakistan have not tried to control use of the name until now. "It's not what India has done or not done that matters here," Hope Shand, RAFI's Research Director in the USA replies, "The issue is Farmers' Rights. International agreements recognize that the farmers themselves have rights here. It is just plain immoral for others to pirate the Basmati name."

"Rice Christians" and the Punjab: As a second concern, although rice is no stranger to Texas, the crop really began to boom with the introduction of IRRI's semi-dwarf germplasm in the seventies. IRRI, in fact, launched a global drive to gather up all the 100 thousand or so farmer-bred varieties in Asia and Africa. A duplicate set of the IRRI seed collection was deposited for safekeeping at a United States Dept. of Agriculture gene bank in Fort Collins, Colorado. It is from such collections that Texans got their breeding stock for Basmati varieties. Pat Mooney says that, "A recent study prepared by the Washington-based International Food Policy Research Institute (IFPRI - a sister agency to Asia's IRRI) noted, with approval, that the value of IRRI germplasm to U.S. rice farmers since 1970 is well in excess of \$1 billion." Patenting Basmati, RAFI argues, is not the way to reward Asia's farmer-breeders for their seed donation. "When America's Christian missionaries went to China earlier in this century, they gave out rice to hungry people in return for their religious conversion" Mooney recalls. "The people were called Rice Christians. Since the 1970s, U.S. foreign aid programmes contributed \$63 million toward IRRI's budget in return for \$1,042 million in germplasm for U.S. farmers. It's just a different kind of Rice Christianity."

Turning the Other Cheek

Today's China is no Rice Christian - and it may be India and Pakistan that will have to 'turn the other cheek'. According to the February issue of Seed & Crops Digest, Prince Hans-Adam II's RiceTec and the Hunan Hybrid Rice Research Center are joining forces with CBG Hybrid Rice, LLC "to produce and market hybrid rice seed in China and select international markets" through a joint venture, the Yuan Longping Hybrid Rice International Co., Ltd.

What's wrong with this picture? First, hybrid rice comes from China. Second, RiceTec's semi-dwarf varieties are modeled after Chinese varieties from Taiwan brought to IRRI in the 1960's. China has the germplasm and the technology. True, RiceTec is the premier hybrid rice breeder in the United States, but that's right up there with having the best hockey team in India. Is the Prince merely hauling coals to Newcastle - or does he have something to offer... like the Punjab's Basmati? How long will it be before this new venture takes over the Basmati market in Asia?

To sort it all out, you have to sort out the Prince, the paddy rice, and Hank Beachell. In 1996, Beachell and Dr. Gurdev Singh Khush (a native of the Punjab) won the World Food Prize for their contribution to the Green Revolution at IRRI. From 1963 to 1982, Beachell (now in his nineties) was IRRI's lead breeder following years of brilliant work on rice in Texas. Beachell is credited with being one of the three "inventors" of IR-8 (a.k.a. CB-801 and a handful of Chinese semi-dwarf varieties). Beachell worked on hybrid rice at IRRI and experimented with high-yielding Basmati strains in The Philippines, Thailand, and Indonesia. He also supported Basmati research in South America. Two years after Beachell retired, RiceTec's precursor, Farms of Texas, laid claim to CB-801 - the IR-8 "derivatives". Now, RiceTec is selling Texmati, Kasmati, and Jasmati varieties and has a patent on Basmati. Hank Beachell continues as a consultant to RiceTec.

Trust and Consequences

The UN Food and Agricultural Organization (FAO) of Rome should also be offended by the RiceTec patent. Under the terms of an IRRI-FAO Trust Agreement signed in 1994, IRRI's rice collection is actually the responsibility of the United Nations agency. The agreement expressly

prohibits IRRI from allowing anybody to take out intellectual property rights on its rice germplasm. All 22 Pakistani varieties listed in the RiceTec patent are part of the FAO Trust. So might be "CB-801" (a.k.a. IR-8). That Hans-Adam II's company has been able to monopolize some (or all) uses of these varieties has shocked governments and plant breeders. FAO's Commission on Genetic Resources for Food and Agriculture - the scientific and political body that oversees trust agreements, meets in Rome in mid-June. FAO delegates are already girding their loins to fight over a number of messy plant patent issues and South Asian governments have served notice that Basmati should be added to the roster. (For details, see: http://www.rafi.ca/moratorium) There are also consequences for the Consultative Group on International Agricultural Research (CGIAR) - the umbrella body for both IRRI and IFPRI that is in the midst of an intense External Review especially concerned with patent and privatization issues. (for more on the External Review, go to: http://cgiar.rafi.org)

Conquering the New World

The sweeping scope of the patent is a third cause for alarm. RiceTec has crafted its claims in order to argue that any Basmati variety crossed with a semi-dwarf strain grown anywhere in North, South, Central America, or the Caribbean is their exclusive intellectual property. "It would be a bit like Liechtenstein claiming not only "Champagne" as a name - but the New World's entire production of sparkling wines" says Hope Shand. This claim subsumes more than 2000 Basmati farmers' varieties in the IRRI collection "backed-up" in the Fort Collins gene bank. "How do you claim biologically, that your Basmati varieties are the only ones that can grow from the Pampas to the Prairies?" Shand asks. "India has varieties that can grow under metres of water and on the edge of deserts. Since when is the Western Hemisphere a specific growing climate for Basmati?"

"Parameter" Paddy Patenting

Industry lawyers who have examined the RiceTec claim are sceptical that the company has done anything worthy of a patent, RAFI says. Pat Mooney reports that, "There is a patent gambit common in the plastics industry known as 'parameter patenting'. A so-called inventor describes a standard product but gives it one hard-to-disprove trait or parameter. Since the patent examiner can't rush off to the lab to test the new trait, the patent is granted and the validity of the claim is let fall to civil litigation." The RiceTec claim may rest upon a pretense such as this. "This is 'tough law' at the best of times - when companies of equal strength duke it out in Washington courtrooms at their own expense," Mooney argues, "but, it's just plain piracy when poor farmers in poor countries are left with the same option to defend their traditional rights. 'Parameter' patents are just a way of circumventing the law," Hope Shand insists, "maybe they think they can get away with it because the losers in this case are poor families in rice paddies."

"Obvious" Rip-off?

Others accuse RiceTec of having merely stated the obvious by crossing Basmati want-to-bes with IR-8 look-alikes. To win a patent monopoly, the invention must be 'non-obvious'. RiceTec, they suggest, may have failed the test. If so, the patent should be deemed invalid. "It's like taking Henry Ford's famous black Model-T and claiming that your pink Model-T is a new invention," RAFI's Mooney suggests, "The question is, can or should Punjabi farmers defend U.S. patent principles in order to protect their seeds?"

Of Princes, Princeton, and Principles:

Shortly after Hans-Adam II's company filed for its Basmati patent in the United States, His Highness made a grant to the Woodrow Wilson School of Public and International Affairs at Princeton University. The grant, as Hans-Adam told a United Nations audience later, is to explore the legal options for self-determination within and without the nation state. The Prince seemed to be questioning (if not attacking) globalization and he spoke of the tension between "universality and the particular". The Prince's enthusiasm for degrees of self-determination may have something to do with the antiquated nature of his own "principality" in the midst of the European Union, but his words stirred a warm response from Indigenous Peoples. In fact, his May, 1996 speech championed the rights of marginalised peoples the world over - including the rights of farmers - or, as FAO and the Biodiversity Convention know it - Farmers' Rights. For the millions of Punjabi farmers who created and defended Basmati rice against the onslaught of the Green Revolution and, now, RiceTec, the question is: will they find a friend in Hans-Adam the Statesman - or a foe in Hans-Adam the Merchant?

Background: Going against the Green

After years of denial, even the Green Revolution's most adamant proponents concede that the primary goal in developing high-response (to fertilizers and irrigation) semi-dwarf rice and wheat was to wipe-out communism - not hunger. In South Asia, however, the threat was not the "Yellow Peril" north of the Himalayas but the aromatic Basmati on the range's southern slopes. The problem was simple. In good years, high-response rice strains could out-yield other varieties in the field. But the Basmati strains from Kashmir and the Punjab could out-perform IRRI's revolutionary seeds in the marketplace. Back in the fifties, Basmati rice sold for almost double the value of the market's number two strains from Thailand. When the super IRRI strains of the sixties came on stream, the odourless and tasteless Green Revolution types still failed the capitalist test of the marketplace two to one. A 1971 study in Pakistan's Punjab Province showed that while IRRI varieties out-yielded Basmati by almost a ton a hectare, the sales profit for Basmati over IRRI was almost four times per ton and three times per hectare. IRRI's own surveys in the seventies showed that Punjabi farmers preferred Basmati over the Green Revolution seeds two to one. In order to create the Green Revolution (and defeat the Red Revolution on the other side of the mountains) either IRRI had to breed high-yielding Basmatis or convince governments to adopt anti-Basmati pricing policies.

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