About ICRISAT

The International Crops Research Institute for the Semi-Arid Tropics (ICRISAT) is a non-profit, non-political organization that conducts agricultural research for development in Asia and sub-Saharan Africa with a wide array of partners throughout the world. Covering 6.5 million square kilometers of land in 55 countries, the semi-arid tropics have over 2 billion people, and 644 million of these are the poorest of the poor. ICRISAT and its partners help empower these poor people to overcome poverty, hunger, malnutrition and a degraded environment through better and more resilient agriculture. ICRISAT is headquartered in Hyderabad, Andhra Pradesh, India, with two regional hubs and four country offices in sub-Saharan Africa. It belongs to the Consortium of Centers supported by the Consultative Group on International Agricultural Research (CGIAR).

Success Stories of Hybrid Pigeonpea in India

Taking Pigeonpea Hybrids to the Door Steps of the Farmers

(A project supported by NFSM, DAC)
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Success Stories of Hybrid Pigeonpea in India

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&
Co-operating Farmers from different States in India

The hybrid pigeonpea is now being popularized in parts of India because of enhancement in the yields. The promising hybrids are ICPH 2671, ICPH 2740 and ICPH 3762. Of these, ICPH 2671 was released as ‘Pushkal’ by seed company in 2008 and later in December, 2010 as ‘RV ICPH 2671’ by State Variety Release Committee, Madhya Pradesh. The other two promising hybrids are under final stage of testing. The yield enhancement recorded in hybrids were between 25 to 30% in farmers’ fields. These hybrids are resistant to both wilt and sterility mosaic diseases. More than 2000 on-farm trials were conducted in the states of Andhra Pradesh, Maharashtra, Karnataka, Madhya Pradesh and Jharkhand. The hybrids have shown high yields under both pure as well as inter-crop conditions. In some on-farm trials hybrids have yielded more than 40 q/ha suggesting a possible breakthrough in the productivity of pigeonpea.
Success Stories of Hybrid Pigeonpea in India

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Mr A Kiran is enjoying the sweet taste of success with hybrid pigeonpea ICPH 2671 in his fields in Bibinagar mandal in Nalgonda district of Andhra Pradesh. He congratulated the ICRISAT pigeonpea team for the successful introduction of the hybrid to farmers. To enhance seed production towards curbing rising prices of toor dal (pigeonpea), ICRISAT developed the hybrid technology and transferred the same to seed companies for commercial release. ICPH 2671 was released for commercial production in July last year. Over 1,200 farmers tested ICPH 2671 in on-farm trials and an average of 28% enhancement in yield was recorded over the Maruti cultivar during the 2008 season. Mr Kiran, an IT engineer from Mahadevpur village near Capol, Bibinagar mandal, was encouraged by an article on the ICRISAT website regarding ICPH 2671. He bought this hybrid seed from APSSDC, and sowed it in three acres with guidance from ICRISAT.

The spacing used was 3ft×1ft but he found crowding of plants and observed lower branches dried up due to lack of sunlight. Mr Kiran harvested 3,300 kg hybrid grain from this sowing. Though the grains were dark colored, he sold the entire quantity of grain at Rs 31 kg⁻¹ at par with other pigeonpea varieties in the nearby Bhongiri market. Kiran earned a net profit of about Rs 48,000, which is around 90% over his investment. He was encouraged by the results of the previous season and has sown more than double (8 acres) the area in the 2009 season. Needless to say, he is very happy to see the present crop growth despite the low rainfall this year.
Mr Kiran, an IT engineer from Mahadevpur village near Capol, Bibinagar mandal, came across an article on ICRISAT website regarding ICPH 2671. He bought the hybrid seed from Andhra Pradesh State Seeds Development Corporation Ltd. (APSSDC), and planted it in three acre. The spacing used was 3ft X 1ft but it resulted in crowding of plants. Kiran harvested 3,300 kg hybrid grain and he sold the entire quantity @ Rs 31/kg in the Bhongiri market. Kiran earned a net profit of about Rs 48,000, which is around 90% over his investment.
The ‘Best Farmer Award’

Mr. G Janardhan, a progressive farmer of Andhra Pradesh, produced exciting results in his farm located in Chautukur, village of Medak district. ICPH 2671 as a sole-crop in 8 acres with spacing of 210 x 30 cm. He used one kg seed for sowing per acre. He also grew LRG 41 in 3 acres in the adjacent land and harvested 10400 kg grains from ICPH 2671 hybrid @3250 kg/ha. Many farmers in and around this village and officers of Department of Agriculture visited his hybrid plot. The Medak District Collector also visited his field and interviewed him personally and appreciated his sincere efforts and recommended him for the State award.

Mr. Janardhan received ‘Best Farmer Award 2009’ from Government of Andhra Pradesh, for harvesting 3250 kg/ha of grains. From this crop he earned a net profit of Rs.2,68,000. This experience showed that the hybrid technology has a potential of breaking the yields barrier in pigeonpea.
Mr B Anjireddy is an interesting progressive farmer of Basavapur, village of Medak district. He cultivated ICPH 2740 planted one kg seed each of ICPH 2740 and Asha under rainfed condition. He harvested 1500 kg grains @ 1250 kg/ha. This farmer recorded 66.7% more yield than local variety which yielded 750 kg/ha. Mr Anji Reddy felt that he can harvest more yields. He would like to promote among farmers this hybrid and to grow more area.
Maharashtra
Mr S S Shinde of Sugaon village of Latur district obtained one kg seed of ICPH 2671 from ICRISAT, Hyderabad, TS 3R from ARS, Gulberga. He planted all these in raised bed to raise seedlings for transplantings. He used different media like Cocopit, straw to raise good saplings. He prepared seedling on 12th May 2010 and transplanted on 7th June 2010 at the spacing of 7 x 2 feet. He planted 2100 seedlings per acre and on an average 2000 plants maintained per acre. He followed all the regular package of practices such as application of fertilizer, timely weeding and spraying etc. for raising a good crop. ICPH 2671 hybrid produced yield of 2000 kg/acre (= 5000 kg/ha). The other varieties TS 3R produced 1500 kg (=3750 kg/ha). He was very happy with hybrid pigeonpea and would like to take up other promising hybrids such as ICPH 2740 and ICPH 3762 in the coming season.

Farmer Name: Shri S S Shinde (2010)
Mobile: 09421486467
Location: Chakur, Latur, Maharasstra
Pigeonpea Hybrid: ICPH 2671
Seed Source: ICRISAT
Cropping pattern: Sole-Crop
Seed Rate: 1.0 kg/ha
Method of sowing: Transplanting
Spacing: 7ft x 2 ft (210 x 60 cm)
Crop Management: Normal
Hybrid Yield: 2000 kg (=5000 kg/ha)
Mr Kadam of Wardha district of Maharashtra obtained information about hybrid pigeonpea from local newspaper and later contacted ICRISAT for more information and obtained one kg seed of ICPH 2671. He took lot of care and harvested 850 kg/acre (=2125 kg/ha) under rainfed conditions. In 2010, based on his past crop performance, several farmers requested him to provide hybrid seed. Upon ICRISAT assurance for seed support, Mr. Kadam selected 28 farmers and ICRISAT provided hybrid seed to them. Mr. Kadam has sent a group request from farmers to get the hybrid pigeonpea seed for planting in kharif 2010. Pigeonpea Breeding, ICRISAT accepted Mr Kadam request and provided pigeonpea hybrid ICPH 2671 and ICPH 2740 one kg each to farmer along with control Maruti and Asha. He planted both hybrid ICPH 2671 and ICPH 2740 and Maruti and Asha in 0.04 ha area on 15 July 2010. First clipping of leaves was done after one month. Second clipping was done one month after first clipping and third after one month. Due to clipping profuse branching occurred. The stem of hybrid pigeonpea looked like a tree stem. At this stage bad weather affected and he lost first two flushes of the crop. He obtained 2625 kg/ha yield from third flush.
Mr V S Karad of Sirsal village, Taluka- Parli at Vajanath, Dist. Beed was very happy with the performance of pigeonpea hybrid ICPH 2671 at his own farm. He got information about hybrid from the local newspaper and he obtained one kg ICPH 2671 from ICRISAT for kharif season 2010. He also planted watermelon and Marigold. He planted hybrid in raised bed to make seedlings. He used different media like Cocopit, straw to raise good saplings. He prepared seedling on 12th May 2010 and transplanted on 7th June 2010. He intercropped pigeonpea with Watermelon and Marigold. He adjusted spacing of 7 x 2 ft for main crop as well as other two crops. First he harvested Watermelon and obtained yield of 15 ton per acre (=37.5 ton/ha). He sold it at a price of Rs. 5 /kg and obtained Rs. 75,000. After one month he harvested 10 qt Marigold and sold at price of Rs. 40 Rs./kg and got Rs. 40,000. At last he harvested pigeonpea and obtained 1200 kg /acre (=3000 kg/ha). He felt that hybrid pigeonpea was bonus crop for him. He was very happy with this new experience of inter-cropping with hybrid pigeonpea.

More and more profits from hybrid

More and more profits from hybrid
Successful Farmers of Kanzara Village

1 Mr. Shankar Giri is a progressive farmer of Kanzara village, Taluka Murtizapur, Akola district. He is inquisitive to adopt new technology in his field. He had 22 acres of medium black soil area which has 50% irrigation facility. In 2008 for the first time he planted 2 kg seed of pigeonpea hybrid by intercropping with soybean in (4:1) in 0.5 acre. He obtained 1700 kg/ha seed yield of pigeonpea hybrid. He was satisfied with performance of hybrid pigeonpea because he obtained 36% more yield than Maruti (1250 kg/ha) cultivar.

2 Mr. Manohar Nathaji Kadu is progressive farmer of Kanzara village, Akola district. He has his own 18 acre medium black soil with irrigation facility to nine acres farm. He grew pigeonpea hybrids ICPH 2671, ICPH 2740 and ICPH 3762 in his farm. Mr. Manohar Kadu for the first time planted 2 kg of ICPH 2671 as intercrop with soybean (5:1 row ratio). He obtained 1775 kg/ha of pigeonpea hybrid ICPH 2671 and 1325 kg/ha of Maruti. He increased area under pigeonpea hybrid during subsequent year and obtained 34% higher yield than Maruti. His description about pigeonpea hybrids-1. High yielding 2. Bold grain 3. Deep root system 4. Better taste of dal 5. Profuse vegetative growth 6. Less seed rate 7. Hardy crop that can be grown on marginal land.
A progressive farmer of Wardha district of Maharashtra obtained seed of hybrid pigeonpea ICPH 2671 and Maruti from ICRISAT and cotton seed from local market. He intercropped pigeonpea with cotton. He used spacing of 8 x 2 ft and sown in an area of 0.15 ha. He planted separate plot of ICPH 2671 + cotton and Maruti + cotton. He followed all the normal cultural package of practices. He harvested 2500 kg/ha grain of ICPH 2671 and 1750 kg/ha of Maruti. The hybrid pigeonpea ICPH 2671 showed heterosis of 43% over Maruti. He was very satisfied with the yield of hybrid pigeonpea over control Maruti.
Mr. Mukesh Patil from Raver (TQ), Jalgaon district grew ICPH 2740 hybrid along with local variety in 5 acre plot. He planted ICPH 2740 in 2.75 acre plot with row to row spacing of 10 ft and plant to plant is 2ft with drip irrigation. Upon the request ICRISAT provided 5 kg seed of ICPH 2740. He also grew fodder maize after 6 rows of hybrid pigeonpea and harvested the same by 70 days. Later in the same area he grew water melon and yet to harvest the same. He was overwhelmed by podding of ICPH 2740 and he harvested 3300 kg (@ 3000 kg/ha) seed from this plot whereas he harvested 900 kg/ha from local.
Success Stories of Hybrid Pigeonpea in India

Maharashtra
Mr Toshniwal Onkar is from Risod, Washim, in Maharashtra. He planted pigeonpea variety (TARA, BSMR 736, BSMR 853, VIPULA, ASHA) and hybrid (ICPH 2671, ICPH 2740, ICPH 3762) during rainy season (July month) of 2010-2011. He obtained all seed from Marathwada Agricultural University, Parbhani. For variety he used 7 x 1 feet and hybrid 4 by 1 feet spacing.

He used drip irrigation and also used growth regulators during cropping season. He harvested hybrid pigeonpea at two-three times.

<table>
<thead>
<tr>
<th>Hybrid</th>
<th>No. of harvests</th>
<th>Yield per plot (kg)</th>
<th>Yield (kg/ha)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ICPH 2671</td>
<td>Two</td>
<td>1970</td>
<td>4690</td>
</tr>
<tr>
<td>ICPH 2740</td>
<td>Three</td>
<td>2440</td>
<td>3873</td>
</tr>
<tr>
<td>ICPH 3762</td>
<td>Two</td>
<td>1840</td>
<td>4381</td>
</tr>
</tbody>
</table>

Many farmers of Risod and other locations visited this plot. The news of hybrid pigeonpea published in local news paper like Agro one, Krishikannathi and Television, ETV. On 26 March 2011. IBN Lokmat and Star Maza news channel visited this location and interviewed of Shri Toshniwal farmer.
Kalyanappa Wali, is a farmer of Allur village which belongs to Aland taluka of Gulbarga district. He is a progressive farmer and owns 33.17 acre land. Out of which he grows redgram in more than 50 per cent of area. In the year 2009-10 under NFSM project 1.5 kg seed of pigeonpea hybrid ICPH-2671 was distributed to him from Agriculture research station Gulbarga.

There was no irrigation source at his farm and wanted to cultivate hybrid pigeonpea under rainfed condition. But we were worried to give ICPH-2671 seeds for demonstration in his land. In this situation also he was ready to take risk to sow hybrid seeds since he was not happy with Gullyal red (local landrace) because of its low yield and wilt susceptibility.

**Name of farmer:** Kalyanappa S/o Veerappa Wali, Allur (B), Aland, Gulbarga

**Mobile no.:**

**Seed Source:** ARS Gulbarga (2010)

**Crop:** ICPH 2671, TS-3R

**Cropping system:** Sole crop

- Sowing method: Drill machine
- Spacing: 90 cm
- Area: 1 ha

**Package of practices:**

- FYM: 2 tones/ha
- Fertilizers: 25:50:0 kg/ha NPK and 20 kg Zinc sulphate
- Intercultivation: two times
- Weeding: two times hand weeding
- Spraying: three times spraying,

**Yield ICPH 2671:** 3750 kg/ha

**TS-3R:** 1850 kg/ha

**Winning over frost to harvest 3750 kg/ha**

Kalyanappa Wali, is a farmer of Allur village which belongs to Aland taluka of Gulbarga district. He is a progressive farmer and owns 33.17 acre land. Out of which he grows redgram in more than 50 per cent of area. In the year 2009-10 under NFSM project 1.5 kg seed of pigeonpea hybrid ICPH-2671 was distributed to him from Agriculture research station Gulbarga.

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During 2009 a total of 730 mm rainfall was received. Timely rains in the month of June (141.5mm.) helped the farmer to sow the hybrid on 28.06.2009. Crop was very good at flowering but due to heavy fog and wind during flowering caused flower drop which resulted in some yield loss. However, he harvested around 3750 kgs of seeds per hectare from the hybrid plot as against the check variety TS-3R, which gave yield of 1850kg/ha. Farmer was happy with performance of ICPH-2671.

**The farmer agronomic practices.**

* FYM ; 2 tones/ha
* Fertilizers; 25:50:0 kg/ha NPK and 20kg Zinc sulphate
* Spacing ; Row to row : 90cm
* Plant to plant: Drill sown then thinning was done
* Inter-cultivation ; two times
* Weeding ; two
* Spraying ; three First spray with profenophos @ 2 ml/lit
* Second spray with indoxicorb @ 0.3 ml/lit + Corbondizeme @ 1gm/lit
* Third spray with Rynaxyphyr @ 0.15 ml/lit

### Economics of hybrid Pigeonpea cultivation

<table>
<thead>
<tr>
<th>Details</th>
<th>Hybrids</th>
<th>Check (TS-3R)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost of cultivation</td>
<td>Rs.13500</td>
<td>Rs. 13500</td>
</tr>
<tr>
<td>Yield</td>
<td>3750 kg</td>
<td>1850 kg</td>
</tr>
<tr>
<td>Rate</td>
<td>Rs.3200/qt</td>
<td>Rs. 3700/qt</td>
</tr>
<tr>
<td>Gross return</td>
<td>Rs. 1,20,000</td>
<td>Rs. 68,450</td>
</tr>
<tr>
<td>Net return</td>
<td>Rs. 1,06,500</td>
<td>Rs. 61,500</td>
</tr>
</tbody>
</table>
Name of farmer: Mr. Devindrappa
S/o Prabu Bidarkar, Hagargundagi, Gulbarga
Seed Source: ARS Gulbarga (2010)
Crop: ICPH 2740, Asha
Cropping system: Pigeonpea + Bengalgram
Sowing method: Drill Machine
Spacing: 120 cm
Area: 1 ha
Package of practices:
- FYM ; 2 tones/ha
- Fertilizers; 25:50:0 kg/ha NPK
- Micronutrients; gypsum 50kg, boran 5kg
- Biofertilizers; soil application of PSB @5kg/ha
- Intercultivation ; two times
- Weeding ; two times hand weeding
- Irrigation: one time irrigated during flowering period
- Intercrop; Blackgram
- Spraying ; three time spraying.
Yield ICPH 2671: 2000 kg/ha
Asha: 1250 kg/ha

Hybrid ICPH 2740 also Excelled in Saline Soil

Mr. Devindrappa is a farmer from Hagargundagi village of Gulbarga taluka. He grows redgram, bengalgram sorghum, onion, brinjal and blackgram in 13 acre of land. In fact his land is saline and salt affected. The farmer has the facility to give one or two protective irrigation. He desired to cultivate hybrid pigeonpea in his farm. Agriculture Research Station Gulbarga supplied 1.5 kg of hybrid ICPH 2740 seed along with 1.5 kg of Asha (check) under the project entitled “Taking Pigeonpea hybrids to the door steps of the farmers” during the year 2010-11. In the previous year, he has harvested 200 to 300 kg/ha of redgram using the local genotypes. With the goal of harvesting high yield he approached to ARS, Gulbarga and got the information on hybrid ICPH 2740.

The farmer has taken up sowing on 26.06.2010 in congenial condition. In addition to redgram he has sown blackgram as inter crop. A heavy rain of 1076mm was received during this year as against average annual rain fall of 760 mm. These heavy rains prolonged vegetative growth resulted in late flowering. Even under these circumstances farmer harvested 3.5 quintals of black gram from 1.5 acre area. As additional income farmer got Rs. 6000/- from blackgram. On application of micronutrients he noticed enhanced growth. The fellow farmers of the village were astonished to see the good crop growth and many farmers impressed about the performance of the hybrid and importance of micronutrients.
Mr. Devindrappa harvested around 2000kgs of seeds per hectare from the hybrid plot as against the check variety Asha, which gave yield of 1250kg/ha. Farmer was happy with performance of ICPH-2740.

The farmer practiced following agronomic practices.

* FYM; 2 tones/ha
* Fertilizers; 25:50:0 kg/ha NPK
* Micronutrients; gypsum 50kg, boran 5kg
* Biofertilizers; soil application of PSB @ 5kg/ha
* Spacing; Row to row: 120cm
* Plant to plant; Drill sown than thinning was done
* Intercultivation; two times
* Weeding; two times hand weeding
* Irrigation: one time irrigated during flowering period
* Intercrop; Blackgram
* Spraying; three time spraying,
  * First spray with profenophos @ 2 ml/lit
  * Second spray with inductorb @ 0.3 ml/lit + Corbon dizeme @ 1gm/lit
  * Third spray with Rynaxyphyr @ 0.15 ml/lit

### Economics of hybrid Pigeonpea cultivation

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<tbody>
<tr>
<td>Cost of cultivation</td>
<td>Rs.14000</td>
<td>Rs. 14000</td>
</tr>
<tr>
<td>Yield/ha</td>
<td>2000 kg</td>
<td>1250 kg</td>
</tr>
<tr>
<td>Rate</td>
<td>Rs.3500/qt</td>
<td>Rs. 3500/qt</td>
</tr>
<tr>
<td>Gross return</td>
<td>Rs. 70,000</td>
<td>Rs. 43,750</td>
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<tr>
<td>Net return from blackgram</td>
<td>Rs. 3000</td>
<td>Rs. 3000</td>
</tr>
<tr>
<td>Net return</td>
<td>Rs. 59000</td>
<td>Rs. 32750</td>
</tr>
</tbody>
</table>
SUCCESS STORY OF PIGEONPEA HYBRID
ICPH 2671 IN MADHYA PRADESH

In Madhya Pradesh pigeonpea is grown in 3.62 lakh ha. Generally medium duration varieties of 170 to 175 days duration are grown with partial areas under early and late duration pigeonpea. The farmers are growing high yielding varieties now a days replacing their old ones because of resistance of new varieties to fusarium wilt.

For enhancing the productivity of pulse crops it is needed to have vertical as well as horizontal expansion. In horizontal expansion the area of a crop need to be increased while in vertical expansion the productivity of the crop needs to be increased. Since past 25 years there is a horizontal growth of area in pigeonpea cultivation which expanded from 320 to 365,000 ha. In Madhya Pradesh. There is also an increasing trend in productivity of the pigeonpea in state during the past five years. This vertical expansion in mainly caused by the use of improved varieties and package of practices.

Since long it felt to the State Govt. as well as to the Scientists of the state to make breakthrough in productivity of pigeonpea in the state. There need to have a change in present status of improved varieties. The hybrid was the only solution to make a major breakthrough in yield enhancement of per unit area.

Advancement of new CMS lines and efforts of pigeonpea scientists of ICRISAT for development of medium duration, wilt resistant hybrid of pigeonpea paved the way to introduce this hybrid in Madhya Pradesh. In 2007 parental lines (ICP 2043 A, ICP 2043 B and ICP 2671 R) of hybrid ICPH 2671 have been sent by Dr. K.B.Saxena, Principal Scientist, ICRISAT to College of Agriculture, Indore while ICP 2043 A and B lines have been procured by College of Agriculture, Sehore (M.P.). The seed of hybrid had been produced by CoA, Indore and it was distributed to the Krishi Vigyan Kendra, Kasturaba Gram, Indore for demonstration purpose. Under rainfed condition the hybrid gave on an average yield of 2000 kg/ha as compared to other varieties which yielded 1600 kg/ha. The demonstration of this hybrid encouraged the pigeonpea growers in the area and in next year the hybrid seed was distributed to many farmers including Berasia block of Bhopal district of Madhya Pradesh.

In Berasia block of Bhopal division, the pigeonpea crop is adopted as the most remunerative intercrop with soybean, as the area is mostly rainfed. Only 2 to 3 kg of seed is either mixed with soybean for one acre of land or it is intercropped with every two rows of soybean. Farmers of this area harvest about 17 to 18 q/ha of soybean and the same quantity is also been harvested from the pigeonpea from the same area. The net income from pigeonpea is found very remunerative to the farmers as whatever the interculture practices adopted for soybean production also favours pigeonpea growth. Many a time this inter crop of soybean-pigeonpea is found in as many as 700 to 800 ha of land in clusters. The pest control measures for pigeonpea are strictly observed by the farmers as they treat this crop as most remunerative and boosting their economic status. Thereby the pigeonpea crop is also being given due importance in this region. The soil of the area is medium black and water holding capacity of the soil is also good. Therefore it favours pigeonpea growth for long duration.

Looking to this agro-ecological situation of the region pigeonpea hybrid ICPH 2671 is introduced in the kharif of 2010 for cultivation in farmer’s field. Demonstrations were conducted along with farmer’s preferred prevailing varieties to determine the increase over local varieties. Farmers harvested 18 to 20% higher yield from this hybrid than what they used to harvest from their prevailing varieties. Looking to its canopy and sturdiness, farmers are convinced that this hybrid has potential for enhancement in yield. Some of the farmers where this hybrid was grown are:
### Success Stories of Hybrid Pigeonpea in India

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Name of Farmers</th>
<th>Village</th>
<th>District</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Akil Miyan</td>
<td>Bawachiya</td>
<td>Bhopal</td>
</tr>
<tr>
<td>2.</td>
<td>Devendra Singh Thakur</td>
<td>Dharamsa</td>
<td>Bhopal</td>
</tr>
<tr>
<td>3.</td>
<td>Lalram Sahu</td>
<td>Dharamsa</td>
<td>Bhopal</td>
</tr>
<tr>
<td>4.</td>
<td>Banne Khan</td>
<td>Dharamsa</td>
<td>Bhopal</td>
</tr>
<tr>
<td>5.</td>
<td>Vinay Singh Chouhan</td>
<td>Dharamsa</td>
<td>Bhopal</td>
</tr>
<tr>
<td>6.</td>
<td>Kishor Maheshwari</td>
<td>Dharamsa</td>
<td>Bhopal</td>
</tr>
<tr>
<td>7.</td>
<td>Rafiq Khan</td>
<td>Lariya</td>
<td>Bhopal</td>
</tr>
<tr>
<td>8.</td>
<td>Hanif Khan</td>
<td>Lariya</td>
<td>Bhopal</td>
</tr>
</tbody>
</table>

The seed production programme of ICPH 2671 was undertaken near Sehore (M.P.) in Farmer’s Participatory Programme with the help of progressive farmer Shri Arun Rai, Sehore (M.P.). The seed of parental lines ICP 2043 A & B was supplied by Research Farm, College of Agriculture, Sehore (M.P.). The ratio of female: male was maintained of 4:2. The crop was grown in around 3.0 ha of land and the farmer produced about 1300 kg of hybrid seed from A lines. This seed will be used in frontline demonstrations in the kharif of 2011 in Sehore and Bhopal districts of Madhya Pradesh.

(Dr. A.N. Tikle)
Pigeonpea Breeder and I/C AICRP on Pigeonpea College of Agriculture, Sehore (M.P.)
Pigeonpea hybrid finds its niche in intensive cropping systems in Jharkhand

- Mr Deolal Singh Nirala, a chiro tribe farmer from Sua village of Medeninagar district, takes four crops in 30 decimals of land. He intercropped ICPH 2671 pigeonpea hybrid with maize and grew lady’s finger as border crop. He harvested 255 kg of pigeonpea earning Rs.12,750 and 100 kg of maize earning Rs. 800. At the same time he sold lady’s finger for Rs 300. He harvested pigeonpea at the end of Jan and took up onion crop in the same field. He also grew cucurbitaceous vegetables on the bund and used pigeonpea stick to support the climbers. He sold onion for Rs.10,000 and cucurbitaceous vegetables for Rs. 1000. Thus, he obtained Rs 24,850 from 30 decimal of land. A pigeonpea field day was organized on 31 Jan 2010 in his field and about 75 farmers along with the Director; Research and scientists of BAU and ICRISAT scientist attended the event and interacted with farmers.

- Mr Ranjeet Prasad, a farmer from Chamba village, Palkot, Gumla district, intercropped ICPH 2671 hybrid pigeonpea with tomato in 0.4 ha land under late sown conditions. First, he transplanted tomato on ridges in the first fortnight of Jul and then, he sowed ICPH 2671 between the tomato rows on 13 Aug adding a little bit of fertilizers. He harvested 0.75 t of pigeonpea from 0.4 ha land realizing an amount of Rs. 37,500 and the sale of tomato fetched him Rs. 30,000. A pigeonpea field day was organized in his village on 17 Jan 2010, which was attended by a large number of villagers along with the Director Research and scientists from BAU, KVK scientist of Gumla and District Agriculture Officer, Gumla.

(PK Singh)
BAU, Ranchi
Appreciation of hybrid pigeonpea dal

The commercial grain of ICPH 2671 has dark brown color which was not accepted in the market in the first year and hence, rate of grain also reduced than compare to other varieties. ICRISAT took initiative and converted about 1000 kg hybrid pigeonpea ICPH 2671 grain to dal in 2008. The hybrid dal was distributed to farmers, traders, consumers and millers for taste evaluation. It was found that it tasted better than normal varieties. In the subsequent years rate of grain also increased in the market.

Farmer views:

* Some of the areas like Badnapur, Jamb and Deonandra were found suitable for cultivation of hybrid ICPH 2671.
* In ICPH 2671 some variations was reported by farmers.
* During this year late maturing varieties/ hybrids have given higher yield as compared to early maturing genotypes due late rains.
* During the month of December there was heavy frost, which resulted in flower drop and effected yield.
* The pigeonpea hybrids ICPH-2671 and ICPH-2740 exhibited good vigour as compared to other pigeonpea varieties.
* The branching habit of ICPH-2671 i.e. from base was appreciated by farmers.
* About 10% off-type plant were noticed by some farmers in ICPH-2671.
* The hybrid ICPH-2740 performed well in heavy soils of Vidarbha region.
* Overall farmers are interested to adopt the hybrid pigeonpea cultivation because of higher yields.
Hybrid on-farm trials and seed production areas
About ICRISAT

The International Crops Research Institute for the Semi-Arid Tropics (ICRISAT) is a non-profit, non-political organization that conducts agricultural research for development in Asia and sub-Saharan Africa with a wide array of partners throughout the world. Covering 6.5 million square kilometers of land in 55 countries, the semi-arid tropics have over 2 billion people, and 644 million of these are the poorest of the poor. ICRISAT and its partners help empower these poor people to overcome poverty, hunger, malnutrition and a degraded environment through better and more resilient agriculture.

ICRISAT is headquartered in Hyderabad, Andhra Pradesh, India, with two regional hubs and four country offices in sub-Saharan Africa. It belongs to the Consortium of Centers supported by the Consultative Group on International Agricultural Research (CGIAR).

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Success Stories of
Hybrid Pigeonpea in India

Taking Pigeonpea Hybrids to the Door Steps of the Farmers
(A project supported by NFSM, DAC)