

TEKNOLOGI INOVATIF

TANAMAN PANGAN



BADAN PENELITIAN DAN PENGEMBANGAN PERTANIAN
KEMENTERIAN PERTANIAN
2012



TEKNOLOGI INOVATIF

TANAMAN PANGAN

KATA PENGANTAR

KEPALA BADAN PENELITIAN DAN PENGEMBANGAN PERTANIAN



Assalamu'alaikum Warahmatullahi Wabarakatuh,

Selaras dengan empat sukses pembangunan pertanian khususnya dan visi pembangunan nasional, Indonesia membutuhkan percepatan transformasi ekonomi agar kesejahteraan bagi seluruh masyarakat dapat diwujudkan lebih dini. Perwujudan itulah yang akan diupayakan melalui langkah-langkah percepatan dan perluasan pembangunan ekonomi Indonesia.

Tuntutan dan dinamika perubahan saat ini membawa dampak pada seluruh aspek yang terkait dengan sektor pertanian, serta persaingan yang semakin ketat akan hasil tanaman pangan, baik regional maupun internasional, mendorong Badan Penelitian dan Pengembangan Pertanian menghasilkan berbagai teknologi pertanian inovatif di subsektor pangan. Inovasi – inovasi tersebut diarahkan baik untuk memecahkan masalah yang dihadapi oleh para pelaku usaha di sektor pertanian saat ini, maupun teknologi alternatif untuk kebutuhan di masa depan yang bersifat antisipatif dan mempunyai prospek dalam penerapannya. Berbagai teknologi inovatif tersebut diharapkan juga dapat mendorong produksi, produktivitas, dan daya saing hasil tanaman pangan.

Berbagai teknologi inovatif Badan Penelitian dan Pengembangan Pertanian pada subsektor pangan dihasilkan melalui serangkaian proses untuk memastikan bahwa inovasi tersebut aplikatif, dan berdampak signifikan dalam peningkatan produksi, daya saing produk yang sekaligus diharapkan dapat meningkatkan kinerja dan semangat para petani dan pelaku usaha. Teknologi – teknologi inovatif tersebut selanjutnya disusun kedalam buku yang berjudul “Teknologi Inovatif Tanaman Pangan”.

Buku ini selain sebagai promosi teknologi Badan Penelitian dan Pengembangan Pertanian secara nasional maupun internasional, juga dapat dijadikan referensi bagi dunia usaha dalam mengembangkan teknologi pertanian yang adaptif, murah dan berdaya saing serta mampu membuat transformasi dalam proses pembangunan pertanian berkelanjutan. Transformasi yang dapat mendorong pada peningkatan kegiatan ekonomi produktif serta mensejahterakan pelaksana pertanian, petani, dan keluarganya.

Wassalamualaikum Warahmatullahi Wabarakatuh,

Jakarta, November 2012

Kepala Badan Litbang Pertanian

Dr. Ir. Haryono, MSc

PREFACE

THE DIRECTOR GENERAL OF INDONESIAN AGENCY FOR AGRICULTURAL RESEARCH AND DEVELOPMENT

Assalamu'alaikum Warahmatullahi Wabarakatuh,

Consistent with the four successful agricultural development in particular and national development vision, Indonesia requires accelerated economic transformation that the welfare of the whole society can be realized earlier. Embodiments that will be pursued through measures acceleration and expansion of Indonesia's economic development.

Demands and the dynamics changing of today have an impact on all aspects related to the agricultural sector, as well as increasing competition in food crops products, both regionally and internationally, encouraging Agricultural Research and Development Agency produces a variety of innovative agricultural technology in sub-sector food crops. Innovations is directed either to solve the problems faced by businesses in the agricultural sector today, as well as alternative technologies for future needs that are anticipatory and have the prospect of its application. Various innovative technology is also expected to boost production, productivity, and competitiveness among food crop product.

Various innovative technology agricultural research and development agencies at sub food crops are generated through a series of processes to ensure that innovation is applicable, and have a significant impact in enhancing production, competitiveness of products as well as expected to improve the performance and morale of the farmers and businesses. An innovative technology which are then compiled into a book entitled "Innovative Technology Food Crops"

This book is not only as a promotion medium of IAARD technologies nationally and internationally but also as a reference for businesses in developing agricultural technologies that are adaptive, inexpensive and competitive and able to make a transformation in the process of sustainable agricultural development. Transformation should lead to an increased in productive economic activities and make the agricultural implementers, farmers and their families prosperous.

Wassalamu'alaikum Warahmatullahi Wabarakatuh.

Jakarta, November 2012
Director General of IAARD,



Dr. Ir. Haryono, MSc

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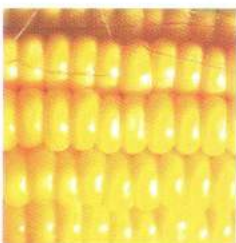
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Tanaman Pangan

Food Crops





01. Padi Varietas Inpara 4

Inpara 4 Rice Variety

Inventor :
Aris Hairmausis, Bambang Kustianto, Supartopo, Suwarno

Balai Besar Penelitian Tanaman Padi
Indonesian Center for Rice Research

Status Perlindungan HKI : -
IPR Protection Status: -

Padi varietas INPARA 4 adalah golongan Cere Indica yang berumur 135 hari bertipe tanaman tegak, tinggi 94 cm. Varietas ini mempunyai ukuran gabah sedang, warna gabah kuning, gabah bobot 19 gram/1000 butir, jumlah anakan produktif 18 anakan, tekstur nasi pera, dan kandungan amilosa 29 %. Produksi rata-rata adalah sebesar 4,69 t GKG/ha hingga 7,63 ton GKG/ha.

Keunggulan varietas ini cocok ditanam pada daerah rawa lebak dangkal dan sawah rawan banjir. Tahan rendaman selama 14 hari pada fase vegetatif dan agak tahan terhadap WCK biotype 3.

Prospek pengembangan komersialisasi dan perdagangan tinggi akan sangat menguntungkan bagi industri perbenihan maupun perberasan.



INPARA 4 rice variety is Indica type having a life cycle of 135 days, upright plants, with a height of 94 cm. This variety has medium grains size with yellow color, 19 g/1000 filled grains, 18 productive tiller number, dry taste rice, and 29% amylose content. The average production is between 4.69 - 7.63 tons dried non-hulled paddy/ha.

The superiorities of this variety are suitable to be planted in swampy land, and rice fields susceptible to flood. It is tolerant to flooded areas for 14 days during the vegetative stage and quite resistant to Brown plant hopper biotype 3.

It has high commercialization and trading prospects. It give high benefit seed and rice industries.

02. Padi Varietas Inpara 5

Inpara 5 Rice Variety

Inventor :

Aris Hairmansis, Bambang Kustianto, Supartopo, Suwarno

Balai Besar Penelitian Tanaman Padi
Indonesian Center for Rice Research

Status Perlindungan HKI : -

IPR Protection Status: -

Padi varietas INPARA 5 adalah golongan Cere Indica yang berumur 115 hari bertipe tanaman tegak, tinggi 92 cm. Varietas ini mempunyai bentuk gabah raping, warna gabah kuning, dengan gabah bobot 25 gram/ 1000 butir, jumlah anakan produktif 18 anakan, bertekstur nasi sedang dengan kandungan amilosa 25 %. Produksi rata-rata adalah 4,45 t GKG/ha hingga mencapai 7,2 GKG/ha.

Keunggulan varietas ini cocok ditanam di daerah rawa lebak dangkal dan sawah rawan banjir. Toleran terendam selama 14 hari pada fase vegetatif dan agak tahan terhadap WCK biotipe 3

Prospek pengembangan komersialisasi dan perdagangan tinggi akan sangat menguntungkan bagi industri perbenihan maupun perberasan.



INPARA 5 rice variety is an early ripening Indica type having an age of 115 days, upright plants, and 94 cm height. This variety has slim non hulled paddy shape with yellow color, 25 g/1000 grains, 18 productive plantlets, medium taste rice texture, and 25% amylase content. The average production is between 4.45 – 7.2 tons dried non-hulled paddy/ha.

The advantages of this variety are suitable to be planted in swampy land, and rice fields susceptible to flood. It is tolerant to flooded areas for 14 days during the vegetative stage and quite resistant to Brown plant hopper biotype 3.

It has high commercialization and trading prospects will and give high beneficiary for seed and rice industries.



02. Padi Varietas Inpara 5

Inpara 5 Rice Variety

Inventor :

Aris Haimansis, Bambang Kustianto, Supartopo, Suwarno

Balai Besar Penelitian Tanaman Padi
Indonesian Center for Rice Research

Status Perlindungan HKI : -
IPR Protection Status: -

Padi varietas INPARA 5 adalah golongan Cere Indica yang berumur 115 hari bertipe tanaman tegak, tinggi 92 cm. Varietas ini mempunyai bentuk gabah raping, warna gabah kuning, dengan gabah bobot 25 gram/ 1000 butir, jumlah anakan produktif 18 anakan, bertekstur nasi sedang dengan kandungan amilosa 25 %. Produksi rata-rata adalah 4,45 t GKG/ha hingga mencapai 7,2 GKG/ha.

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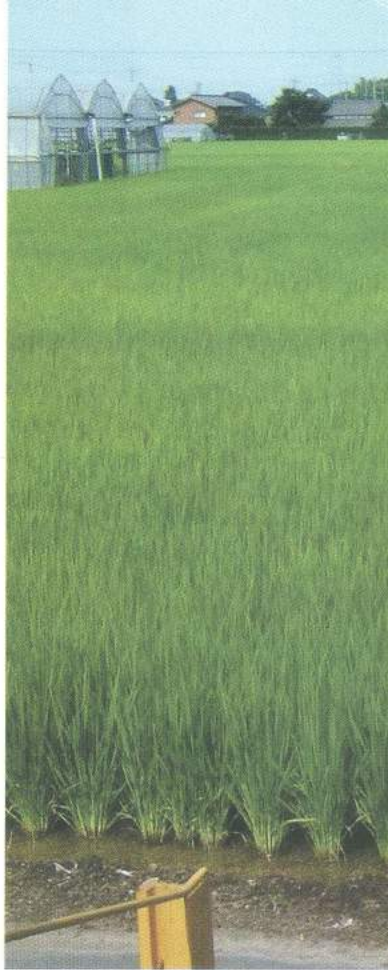
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It has high commercialization and trading prospects will and give high beneficiary for seed and rice industries.



03. Padi Varietas Inpari 7 Lanrang *Inpari 7 Lanrang Rice Variety*

Inventor :

Aan Andang Daradjat, Nafisah, Bambang Suprihatno

Balai Besar Penelitian Tanaman Padi

Indonesian Center for Rice Research

Status Perlindungan HKI : Pendaftaran Varietas No 115/PPVHP/2009

IPR Protection Status : Variety Registration No. 115/PPVHP/2009

INPARI 7 LANRANG adalah golongan Cere yang berumur 110-115 hari bertipe tanaman tegak, tanaman ini mempunyai tinggi 104 ± 7 cm. Bentuk gabahnya panjang, warna gabah kuning bersih, dengan gabah bobot 27,4 gram/ 1000 butir, jumlah anakan produktif ± 16 anakan, bertekstur nasi pulen dengan kandungan amilosa 20,78 %. Rata-rata produksi hasil panen 6,23 t GKG/ha.

Keunggulan padi Inpari 7 Lanrang ini memiliki tingkat produksi tinggi, agak tahan terhadap HDB ras III, agak rentan ras IV dan VIII, agak tahan penyakit virus tungro varian 013, cocok ditanam pada ekosistem sawah dataran rendah sampai ketinggian 600 m dpl.

Padi Inpari 7 ini cocok untuk dikembangkan atau diperdagangkan, karena beras varietas ini sangat diminati petani, pedagang beras, dan konsumen.

INPARI 7 LANRANG rice variety is an early ripening type of 110-115 days, upright plant type, and has 104 ± 7 cm plant height. It has long-shaped non-hulled rice, bright yellow non-hulled rice, 27.4 grams/ 1000 dried non-hulled grains, ± 16 productive plantlets, good tasting rice texture, 20.78 % amylose content and an average of 6.3 t dried non-hulled grains/ha yield.

The superiority of Inpari 7 Lanrang rice lies on high productivity, quite resistant to HDB ras III, rather susceptible to ras IV and VIII, quite resistant to varian 013 tungro virus, suitable to be planted in lowland rice field ecosystem at the altitude up to 600 m above the sea level, and has good rice texture.

Inpari 7 rice variety is suitable to be developed or traded as this rice variety is favored by farmers, rice traders, and consumers.



04. Padi Varietas Inpari 8

Inpari 8 Rice Variety

Inventor :

Aan Andang Daradjat, Nafisah,
Bambang Suprihatno

Balai Besar Penelitian Tanaman Padi
Indonesian Center for Rice Research

Status Perlindungan HKI : Pendaftaran Varietas No. 116/PPVHP/2009
IPR Protection Status : Variety Registration No. 116/PPVHP/2009

INPARI 8 termasuk padi sawah yang memiliki rumpun tanaman yang agak tegak, termasuk golongan Cere yang berumur 125 hari, tanaman ini mempunyai tinggi 113 ± 8 cm. Varietas ini mempunyai bentuk gabah panjang dan ramping, warna gabah kuning bersih, bobot gabah 27,4 g/1000 butir, dan jumlah anakan produktif 19 ± 3 anakan/rumpun.

Keunggulan produksi rata-rata varietas ini mencapai 6,25 ton GKG/ha, tekstur nasi pulen, dan kandungan amilosa 21 %, cocok ditanam di lahan irigasi dengan ketinggian 600 m dpl, agak tahan penyakit HDB ras III dan penyakit tungro inokulum No. 073; tahan penyakit tungro inokulum No. 013 dan 031.

Prospek pengembangan dan komersial padi Inpari 8 tinggi, volume beras yang diperdagangkan tinggi karena sangat diminati petani, pedagang beras, dan konsumen.



INPARI 8 is a rice variety having rather upright clumps included in early ripening with a life cycle of 125 days, upright plants, 113 ± 8 cm in height, and of shoot productive per clump about 19 ± 3 . This variety has long and slim non hulled grain with bright yellow color and 27.4 g/1000 filled grains. The yield potential is 6.25 tons/ha of dry unhull rice.

The superiorities of this variety are high productivity with average yield of 6.25 tons/ha of dry unhull rice, good taste and texture, and having 21% amylose content. It is suitable to be planted in irrigated low land rice up to 600 m above sea level, quite resistant to HDB ras III disease and tungro inoculums No 073 and resistant to tungro inoculums No 013 and 031.

It has high development and commercial prospect, high trade volume as it is demanded by farmers, rice traders, and consumers.



05. Padi Varietas Inpari 9 ELO Inpari 9 ELO Rice Variety

Inventor :

Aan Andang Daradjat, Nafisah, Bambang Suprihatno

Balai Besar Penelitian Tanaman Padi
Indonesian Center for Rice Research

Status Perlindungan HKI : Pendaftaran Varietas No. 117/PPVHP/2009
IPR Protection Status : Variety Registration No. 117/PPVHP/2009

INPARI 9 ELO termasuk padi sawah berumur genjah + 125 hari, bertipe tanaman tegak, tinggi 113 ± 8 cm. Varietas ini mempunyai bentuk gabah panjang dan ramping, warna gabah kuning bersih, dengan bobot gabah 22,8 g/1000 butir, jumlah anakan produktif 18 ± 3 anakan/rumpun.

Keunggulan varietas ini mempunyai tekstur nasi pulen, kandungan amilosa 20,46 %, rata-rata produksi 6,41 ton GKP/ha, cocok ditanam di lahan irigasi dengan ketinggian 600 m dpl. Agak tahan penyakit HDB ras III dan tungro inokulum No. 073, 031, 013.

Potensi pengembangan dan komersial tinggi, volume beras yang diperdagangkan tinggi karena diminati oleh petani, pedagang beras, maupun konsumen.

INPARI 9 ELO is a lowland variety with short life cycle of 125 day old, upright plant type of 113 ± 8 cm height. This variety has a long and slim non hulled rice shape with bright yellow color and 22.8 g/1000 filled grains, and productive tiller number of 18 ± 3 /clump. The yield potential is 6.41 tons dried non hulled rice/ha.

This variety has superiorities such as good tasting rice texture, 20.46% amylose content, and is suitable to be planted in irrigated land of 600 m above sea level, quite resistant to HDB ras III disease and tungro inoculums No 073, No 031, and No 013.

It has a high commercial development prospect, high trade volume as it is demanded by farmers, rice traders, and consumers.



06. Padi Varietas Inpari 10 LAEYA

Inpari 10 LAEYA Rice Variety

Inventor :

Aan Andang Daradjat, Nafisah, Bambang Suprihatno

Balai Besar Penelitian Tanaman Padi

Indonesian Center for Rice Research

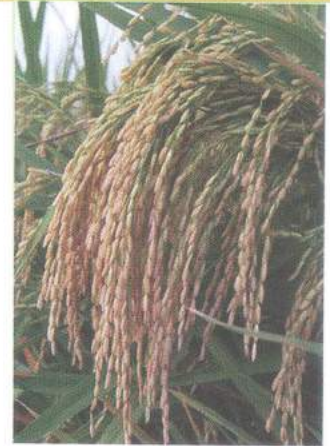
Status Perlindungan HKI : Pendaftaran Varietas No. 118/PPVHP/2009

IPR Protection Status : Variety Registration No. 118/PPVHP/2009

Padi varietas INPARI 10 LAEYA termasuk padi sawah tadah hujan, berumur genjah 108-116 hari bertipe tanaman tegak, tanaman ini mempunyai tinggi 100-120 cm. Bentuk gabah ramping panjang, warna gabah kuning bersih, bobot gabah 27,4 g/1000 butir, jumlah anakan produktif 16 ± 3 anakan/rumpun. Produksi rata-rata 5,08 ton GKG/ha.

Keunggulan varietas padi ini cocok ditanam lahan tadah hujan dengan selang pengairan satu minggu. Tekstur nasi pulen dengan kandungan amilosa 22 %. Agak tahan hama wereng batang coklat biotipe 1 dan 2, agak tahan penyakit HDB strain III.

Potensi pengembangan dan komersialisasi varietas ini sangat cocok dikembangkan pada daerah-daerah yang sering mengalami kekeringan, memiliki karakteristik mutu gabah dan mutu beras seperti Ciherang.



INPARI 10 LAEYA is rain fed low land rice variety with short life cycle of 108-116 days, upright plants, with a height of 100-120 cm. The grain rice shape is long and slim with bright yellow color and 27.4 g/1000 filled grains, and productive tiller number of 16 ± 3 . The yield potential is 5.08 tons unhunk rice grains/ ha.

Suitable to be planted in rainfed area with an interval irrigation of a week. Good taste and texture with 22% amylose content. It is quite resistant to brown plant hopper biotypes 1 and 2, and HDB ras III disease.

It is very suitable to be developed in areas frequently experiencing droughts, and with rice qualities similar to those of Ciherang.



07. Padi Varietas Inpari 11 *Inpari 11 Rice Variety*

Inventor :
Aan A. Daradjat, Bambang S., Nafisah, Cucu G.
Trias S., M. Yamin S., Baehaki, Riny S. K.,
Suprihanto, Tri Hadi W., Anggiani N.,
Rina D. AA Kamandalu, Akmal, Ali Imron, Zairin

Balai Besar Tanaman Padi
Indonesian Center for Rice Research

Status Perlindungan HKI : -
IPR Protection Status : -

Varietas ini hasil persilangan antara padi sawah varietas Cisadane dengan IR54742-1-19-11-8 dan termasuk dalam golongan Cere. Inpari 11 ini memiliki bentuk tanaman tegak dengan tinggi mencapai 106 cm dan mempunyai jumlah anakan produktif mencapai 18 batang.

Bentuk gabahnya adalah ramping dan berwarna kuning bersih, mempunyai tingkat kerontokan sedang, dan menghasilkan nasi dengan tekstur pulen yang berkandungan amilosa 21,35%.

Varietas Inpari 11 berumur sangat genjah yakni 108 hari dan mempunyai potensi hasil tinggi yaitu 8,80 ton/ha.

Keunggulan lain adalah tahan terhadap penyakit blas ras 133 serta tahan terhadap penyakit Hawar Daun Bakteri strain III. Tak hanya itu, varietas ini juga mendukung program Peningkatan Produksi Beras Nasional karena umur tanamnya yang relative lebih singkat dan mempunyai produktivitas yang tinggi.



This variety originated from a cross breeding between paddy rice Cisadane variety and IR54742-1-19-11-8 which included in the Cere group. Inpari 11 has a form of upright plants with plant height reaches 106 cm and has a number of tillers up to 18 stems.

The rice grain is lean and clean yellow. Inpari 11 also includes the type of rice that has a medium level of loss and produces a fluffier texture of cooked rice with amylose of 21.35%.

Variety Inpari 11 is one of the varieties released by the ICRR in 2009. This variety has advantages are very short harvest time which is 108 days, a tasting rice, and fairly high yield variety. The potential yield reaches 8.80 t ha⁻¹. Another advantage is resistances to rice blast race 133 diseases and the Leaf Blight Bacteria disease.



08. Padi Varietas Inpari 12

Inpari 12 Rice Variety



Inpari 12 berasal dari persilangan antara IR63356-SEL dengan TN1 dan termasuk dalam golongan Cere. Bentuk tanamannya tegak dengan tinggi sekitar 99 cm dan memiliki jumlah anakan produktif mencapai 18 batang. Padi ini mempunyai bentuk gabah ramping berwarna kuning bersih. Varietas ini termasuk jenis padi yang mempunyai tingkat kerontokan sedang.

Varietas Inpari 12, tergolong varietas berumur sangat genjah yaitu 103 hari dan mempunyai potensi hasil tinggi 8,0 ton/ha. Padi ini pun sangat sesuai untuk ditanam di ekosistem sawah tadah hujan dataran rendah sampai ketinggian 600 m dpl. Inpari 12 juga tahan penyakit blas ras 033 serta tahan terhadap wereng batang coklat.

Adapun tekstur nasi yang dihasilkan adalah pera dengan kandungan amilosa 26,4%.

Inventor :

Aan A. Daradjat, Bambang S., Nafisah, Cucu G. Trias S., M. Yamin S., Bachaki, Riny S. K., Suprihanto, Tri Hadi W., Anggiani N., Rina D. AA Kamandalu, Akmal, Ali Imron, Zairin

Balai Besar Tanaman Padi

Indonesian Center for Rice Research

Status Perlindungan HKI : 109/PVHP/2011

IPR Protection Status : 109/PVHP/2011

Inpari 12 is originated from a cross breeding between IR63356-SEL and TN1 and also part of the Cere group. Its plant is upright with a height of approximately 99 cm and has productive tiller number up to 18 stems. The rice grain has a slender form of a yellow net.

Inpari 12 was classified as one variety that has a short harvest time which is around 103 days and it has the potential yield about 8.0 t ha. This rice variety is also very suitable to be planted at rain fed lowland rice and lowland ecosystem up to 600 m above sea level. Inpari 12 also resistant to blast race 033 and brown plant hopper.

The texture of the rice that is produced is inflammation with amylose content of 26.4%.

09. Padi Varietas Inpari 13 *Inpari 13 Rice Variety*

Inventors: Nafisah, Cucu Gunarsih, Bambang Suprihatno, Aan A. Daradjat, Trias Sitaresmi, dan M. Yamin Samaullah.

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Indonesian Rice Research Institute

Status Perlindungan HKI : 110/PVHP/2011
IPR Status Protection : 110/PVHP/2011



Padi Inpari 13 berumur sangat genjah, dipanen umur 103 hari, berbatang tegak, tinggi tanaman 101 cm, jumlah anakan produktif 17 batang per rumpun.

Inpari 13 potensi hasil tinggi 8,0 t GKP/ha, beradaptasi pada ekosistem sawah dan lahan tadah hujan, pada dataran rendah sampai 600 m dpl. Tingkat kerontokan gabah sedang, tekstur nasi pulen dengan kandungan amilosa 22,40%, tahan penyakit blas dan wereng coklat.

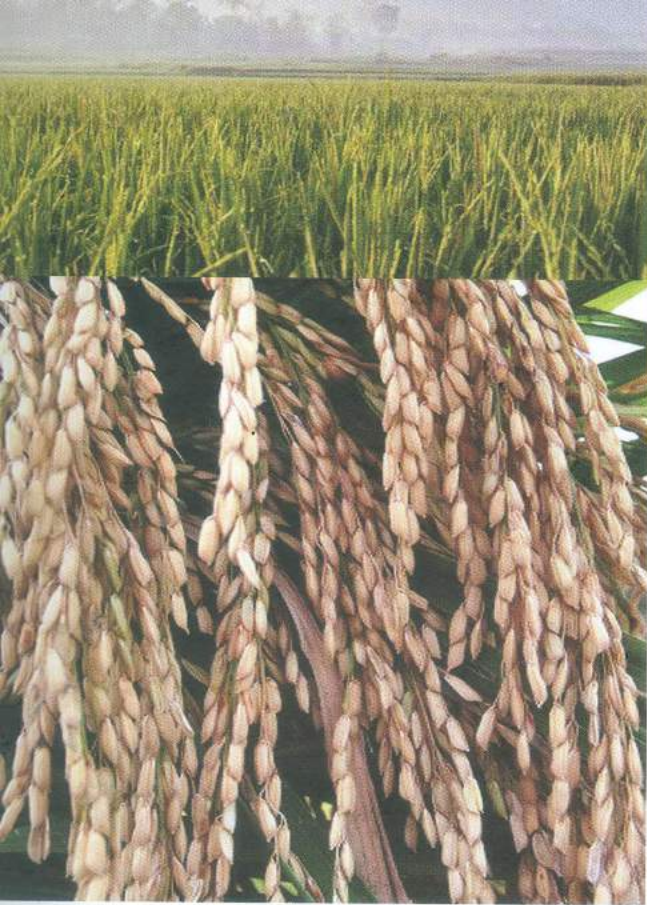
Kehadiran varietas padi inbrida potensial digunakan sebagai padi berumur genjah dan produktivitasnya tinggi. Berpotensi dikembangkan oleh industri benih dalam rangka mensukseskan program surplus 10 juta ton beras.

Inpari 13 rice is very early ripening, harvested 103 days old and has straight stems, 101 cm plant height, and 17 productive tillers per clump.

Inpari 13 has a high yield potential of 8.0 t DHG / ha, adapts to the irrigated and rainfed rice field ecosystem on lowland up to 600 m above the sea level. The level of grain loss is medium and the rice has fluffier texture with 22.40% amylose content, is resistant to blast diseases and brown planthopper.

The presence of this potential rice variety is used as an early ripening rice and high productivity. It is potentially to be developed by the seed industry in order to succeed the program of 10 million tons of rice surplus.





10. Padi Varietas Inpago 4 *Inpago 4 Rice Variety*

Inventor :
Kustianto, S. Suharsono, Suwarno, Santoso
Anggiani N., Husin M. Toha

Balai Besar Tanaman Padi
Indonesian Center for Rice Research

Status Perlindungan HKI : -
IPR Protection Status : -

Dirilis oleh BB Padi pada tahun 2009 yang merupakan persilangan dari Batutegi/Cigeulis/Ciherang dan termasuk dalam golongan Cere. Varietas Inpago 4 yang memiliki umur tanaman mencapai 124 hari ini berbentuk tegak dengan tinggi tanaman 134 cm dan mempunyai jumlah anakan produktif mencapai 11 batang.

Bentuk gabah padi ini adalah lonjong dan berwarna kuning jerami serta menghasilkan nasi bertekstur pulen dengan kandungan amilosa 21%. Padi ini mampu menghasilkan rata-rata 4,15 ton/ha dengan potensi hasil mencapai 6,08 ton/ha.

Inpago 4 mempunyai beberapa keunggulan seperti tahan terhadap beberapa ras blas, toleran Al, serta mempunyai mutu beras yang baik. Selain itu, padi varietas ini dapat menjadi alternatif budi daya padi di lahan kering subur maupun pada lahan kering podzolik merah kuning.

Released by the ICRR in 2009 which is the intersection of Batutegi / Cigeulis // Ciherang and part of the Cere group. It has the age of 124 days and the height up to 134 cm. It also has a number of productive tillers up to 11 stems.

The shape of the rice grain is oval and yellow colored also produce fluffier textured with amylase content of 21%. The average production is about 4.15 t ha⁻¹ with the potential yield reaches 6.08 t ha⁻¹.

Inpago 4 has several advantages such as resistant against several blatts races, tolerant to Al toxicity, as well as having good quality rice. In addition, this rice variety could become alternative rice cultivation in the upland and in upland podzolic yellow red.

11. Padi Varietas Inpago 5

Inpago 5 Rice Variety

Inventor :
Erwina Lubis, Suwarno, Aris H., Kustianto,
S. Suharsono, Santoso, Anggiani N.,
Husin M. Toha

Balai Besar Penelitian Tanaman Padi
Indonesian Center for Rice Research

Status Perlindungan HKI : -
IPR Protection Status : -

Inpago 5 merupakan varietas padi gogo yang termasuk dalam golongan cere dengan umur tanaman mencapai 118 hari. Padi varietas ini mempunyai bentuk tanaman tegak, tinggi sekitar 132 cm, dan memiliki jumlah anakan produktif hingga 14 batang. Adapun bentuk gabahnya ramping dan berwarna kuning.

Padi yang mencapai rata-rata hasil 4,04 ton/ha dengan potensi hasil mencapai 6,18 ton/ha ini menghasilkan tekstur nasi yang sangat pulen, dengan kandungan amilosa 18%.

Adapun kelebihan dari varietas yang dirilis tahun 2009 ini adalah, tahan terhadap ras penyakit blas, toleran akan kekeringan, dan agak toleran terhadap keracunan Al (60 ppm). Inpago 5 ini juga bermanfaat untuk dijadikan alternatif budi daya padi di lahan kering subur maupun pada lahan kering podzolik merah kuning.



Inpago 5 is one of the upland rice varieties, belong to the Cere group and the plants age reaches 118 days. This rice variety has an upright plant form, about 132 cm tall, and has a number of productive tillers up to 14 stems. The shape of the rice grain is slender with yellow color.

The average production is about 4.04 t ha⁻¹ with a potential yield reaches 6.18 t ha⁻¹ and it produces a fluffier texture of cooked rice, with the amylose content of 18%.

The advantages of the variety released in 2009 are resistant to blast race disease, tolerant to drought, and somewhat tolerant to Al toxicity (60 ppm). Inpago 5 is also useful to be used as an alternative cultivation of upland rice in the fertile and in upland podzolic yellow red.

Inventors : B. Kustianto, Erwina Lubis,
Aris Hairmansis, Supartopo, dan Suwarno,

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Indonesian Rice Research Institute

Status Perlindungan HKI : -
IPR Status Protection : -



Inpago 6 rice can be harvested at 113 days, has upright stems, 117 cm plant height, 11 tillers per clump, slender grain of straw yellow color.

This rice has the potential production of 5.81 t DHG /ha. This upland rice is blast resistance, has good quality, fluffier texture and 22% amylose content.

The presence of this variety is as an alternative to dry land farmers to obtain high yields. It is potential to be developed by the seed industry to supply rice seeds for dry and marginal land.

12. Padi Varietas Inpago 6 *Inpago 6 Rice Variety*

Padi Inpago 6 dapat dipanen pada 113 hari, berbatang tegak, tinggi tanaman 117 cm, jumlah anakan 11 batang per rumpun, bentuk gabah ramping dan warnanya kuning jerami.

Padi Inpago 6 mempunyai potensi produksi 5,81 t GKP/ha. Padi gogo ini tahan blas, mutu beras baik, tekstur nasi pulen dan kandungan amilosa 22%.

Kehadiran varietas ini sebagai alternatif petani lahan kering untuk mendapatkan hasil tinggi. Potensial dikembangkan oleh industri benih untuk memasok benih padi pada lahan kering dan lahan marginal.



13. Padi Varietas Situ Patenggang *Situ Patenggang Rice Variety*

Inventor :

Ismail B. P., Yamin S.,
Z. A. Simanullang, A. A. Daradjat.

Balai Besar Penelitian Tanaman Padi
Indonesian Center for Rice Research

Status Perlindungan HKI :

Pendaftaran Varietas No. 129/PPVHP/2009

IPR Protection Status:

Variety Registration No. 129/PPVHP/2009

Situ Pategang adalah varietas padi gogo (amphibi) yang berumur genjah (110-120 HSS), bertipe tanaman tegak, tanaman ini mempunyai tinggi antara 100 - 110 cm. Varietas ini mempunyai bentuk biji agak gemuk, warna gabah kuning kotor, bobot gabah 27 g/1000 butir, jumlah anakan produktif 10 - 11 batang/rumpun, produksi rata-rata 4,0 t GKG/ha.

Keunggulan varietas ini tahan blas, tekstur nasi sedang, bersifat aromatik, dan responsif terhadap pemupukan. Dapat dikembangkan di lahan kering pada musim hujan, lahan tipe tanah alluvial dan podsolik.

Varietas ini potensial dikembangkan secara komersial oleh industri benih Direktorat Jendral Teknis, dan Pemerintah Daerah di lahan kering pada musim hujan dengan ketinggian tempat kurang dari 300 m dpl.



Situ Pategang can be classified into dry field rice variety having an early ripening age (110-120 days after sowing), upright type, and 100 - 110 cm height. This variety has a rather fat shape grain with griny yellow color, 27 g/1,000 dried non-hilled grains, 10 -11 shoots/clump, an average yield of 4.0 t dried non-hulled paddy/ha.

The advantages of the variety are resistant to blast, has medium tasting rice texture and an aromatic characteristic, and responsive to fertilizing. It can be developed in dry soil during the rainy season on alluvial and podzolic soils

It is potential to be commercially developed by seed industry, Technical Directorate Generals, and Local Government on dry land during the rainy season with an altitude of less than 300 m above sea level.

14. Padi Varietas Aek Sibundong *Aek Sibundong Rice Variety*



Varietas Aek Sibundong tumbuh baik pada lingkungan sawah, tinggi tanaman 108 - 116 cm, umur tanaman 108-125 HSS. Bentuk biji ramping, warna gabah kuning bersih, bobot gabah 27 g/1000 butir, jumlah anakan produktif 16 - 20 batang/rumpun, produksi rata-rata 6,0 t/ha, dan berat derajat sosoh 80% adalah 0,96 mg/100g berat kering.

Keunggulan varietas ini memiliki tekstur nasi pulen, warna beras dan nasi merah, mengandung vitamin B3. Cocok untuk ditanam pada lokasi di sekitar 700 m dpl, baik pada musim hujan ataupun kemarau. Varietas ini tahan terhadap wereng coklat biotipe 2 dan 3, agak tahan HDW strain IV.

Varietas ini sangat potensial dikembangkan untuk memenuhi konsumsi restoran, karena memiliki karakteristik khusus, yaitu warna beras merah dan kaya vitamin B3.

Inventor :

Z. A. Simanulang, Aan A. Daradjat, B Suprihatno.

Balai Besar Penelitian Tanaman Padi
Indonesian Center for Rice Research

Status Perlindungan HKI :

Pendaftaran Varietas No. 107/PPVHP/2009

IPR Protection Status:

Variety Registration No. 107/PPVHP/2009

Aek Sibundong variety grows well at irrigated field, 108 - 116 cm in height, maturity at 108-125 days old after planting. It has slim grains, grimy yellow non-hulled rice, 27 g non-hulled paddy/1000 grains, 16 - 20 shoots/clump, an average yield of 6.0 t/ha, and the 80 % whitening weight ratio is 0.96 mg/100g dry weight.

The rice has a good tasting texture, red color for both the rice and cooked rice, contains B3 vitamin. It is suitable to be planted in locations of around 700 m above sea level in dry and wet seasons. This variety is resistant to Brown plant hopper biotypes 2 and 3, and quite resistant to HDW strain IV.

It is potential to meet the restaurant consumption as it has specific characteristic, i.e. red rice color and rich in B3 vitamin.



15. Padi Hibrida Varietas HIPA Jatim 1

HIPA Jatim 1 Hybrid Rice Variety



Inventors : Satoto, Murdhanu Direja, Sudibyo T. W Utomo, Yuni Widyastuti, dan Indrastuti A.R.

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Indonesian Center for Rice Research

Status Perlindungan IHK : 1 / Peng / 01 / 2012
IPR Protection Status : 1 / Peng / 01 / 2012



Padi Hipa Jatim 1 dipanen pada umur 119 hari, berbatang tegak, tinggi tanaman 117 cm, jumlah anakan produktif 16 batang per rumpun.

Padi hibrida ini produktivitasnya 10 t/ha di musim kemarau dan 9,7 t/ha di musim hujan atau 11,4% lebih tinggi dibanding Ciherang. Hipa Jatim 1 rentan terhadap wereng coklat. Tampilan fisik beras putih dan mengkilap, rasa nasi pulen, aromatik, kandungan amilosa 17%.

Kehadiran Padi Hipa Jatim 1 menjadi alternatif bagi petani untuk memilih benih padi hibrida unggul. Prospektif dikembangkan oleh agro industri benih dalam rangka mendukung program surplus 10 juta ton beras.

HIPA Jatim 1 rice is harvested at the age of 119 days, has upright stems, 117 cm plant height, 16 productive tillers per clump.

This hybrid rice productivity is 10 t / ha in the dry season and 9.7 t / ha in the rainy season or 11.4% higher than that of Ciherang. HIPA Jatim 1 is susceptible to brown plant hopper. The physical appearance of the rice is polished white, fluffier flavor, aromatic, and the rice has 17% amylose content.

The presence of a Java Rice HIPA Jatim 1 can be an alternative for farmers to select superior hybrid rice seeds. It is prospective to be developed by the seed agro-industry to support the program of 10 million tons of rice surplus.

16. Padi Hibrida Varietas HIPA Jatim 2

HIPA Jatim 2 Hybrid Rice Variety

Inventors: Satoto, Murdhani Direja, Sudibyo T. W Utomo, Yuni Widyastuti, dan Indrastuti A.R.

Balai Besar Penelitian Tanaman Padi
Indonesian Center for Rice Research

Status Perlindungan HKI : 66 / Peng / 12 / 2012
IPR Protection Status : 66 / Peng / 12 / 2012

Padi Hipa Jatim 2 dapat dipanen umur 119 hari, berbatang tegak, tinggi tanaman 116 cm, jumlah anakan produktif 16 batang per rumpun. Jumlah gabah 206 butir per malai.

Padi hibrida ini produktivitasnya tinggi mencapai 10,9 t/ha di musim kemarau dan 10,7 t/ha di musim hujan. Tampilan fisik beras putih mengkilap, tekstur nasi pulen, aromatik, kandungan amilosa 21,5%. Padi hibrida ini agak rentan terhadap wereng coklat dan penyakit tungro.

Kehadiran Padi Hipa Jatim 2 menjadi alternatif bagi petani untuk memilih benih padi hibrida unggul dan prospektif dikembangkan oleh agro industri benih dalam rangka mendukung program surplus 10 juta ton beras.

HIPA Jatim 2 rice can be harvested at the age of 119 days, has upright stems, 116 cm plant height, 16 productive tillers per clump and 206 grains per panicle.

This high productivity of this hybrid rice reaches 10.9 t/ha in the dry season and 10.7 t/ha in the rainy season. The physical appearance of the rice is polished white, fluffier flavor, aromatic, and the rice has 21.5% amylose content. This hybrid rice is quite susceptible to brown planthopper and tungro diseases.

The presence of HIPA Jatim 2 rice becomes an alternative for farmers to select superior hybrid rice seeds and it is prospective to be developed by the seed agro industry in order to support the program of 10 million tons of rice surplus.



29. Padi Hibrida Varietas Hipa Jatim 3

Hipa Jatim 3 Hybrid Rice Variety

Inventors: Satoto, Murdhani Direja, Sudibyo T. W Utomo,
Yuni Widyastuti, dan Indrastuti AR

Balai Besar Penelitian Tanaman Padi
Indonesian Center for Rice Research

Status Perlindungan HKI : 2 / Peng / 01 / 2012
IPR Protection Status : 2 / Peng / 01 / 2012

Padi Hipa Jatim 3 dipanen pada umur 117 hari, berbatang tegak, tinggi tanaman 109 cm, jumlah anakan produktif 16 batang per rumpun.

Padi hibrida ini produksinya tinggi mencapai 10,7 t/ha pada musim kemarau dan 10,0 t/ha pada musim penghujan. Penampilan fisik beras putih, agak kilap, kandungan amilosa 20%, tekstur nasi sangat pulen. Hipa Jatim 3 rentan terhadap wereng coklat dan tungro.

Kehadiran Padi Hibrida ini menjadi alternatif bagi petani untuk memilih benih padi hibrida unggul dan prospektif dikembangkan oleh agro industri benih dalam rangka mendukung program surplus 10 juta ton beras.

HIPA Jatim 3 rice is harvested at the age of 117 days, has upright stems, 109 cm plant height, and 16 productive tillers clump.

This hybrid rice has a high production reaching 10.7 t/ha in the dry season and 10.0 t/ha in the rainy season. The physical appearance of the rice is white, a little luster as well as fluffier texture and the rice has 20% amylose content. HIPA Jatim 3 is susceptible to brown planthopper and tungro.

The presence of this hybrid rice becomes an alternative for farmers to select superior hybrid rice seed and is prospective to be developed by the seed agro industry in order to support the program of 10 million tons of rice surplus.



18. Padi Gogo Varietas Situ Bagendit *Situ Bagendit Upland Rice Variety*

Inventor :
Z. A. Simanulang

Balai Besar Penelitian Tanaman Padi
Indonesian Center for Rice Research

Status Perlindungan HKI :
Pendaftaran Varietas No.130/PVHP/2008
IPR Protection Status :
Variety Registration No. 130/PVHP/2008

Padi varietas Situ Bagendit adalah salah satu varietas padi gogo, tetapi mampu tumbuh baik pada lingkungan lahan sawah. Tanaman ini mempunyai tinggi antara 99 - 105 cm, dengan umur tanaman 110 - 120 Hari setelah sebar (HSS). Varietas Situ Bagendit memiliki bentuk biji ramping, warna gabah kuning bersih, dengan bobot 1000 butir adalah 27,5 gram. Varietas ini mempunyai anakan produktif 12 - 13 batang/rumpun.

Varietas ini tahan terhadap penyakit blas, agak tahan terhadap penyakit hawar daun, dan tahan terhadap penyakit tungro. Varietas ini menghasilkan tekstur nasi pulen, rata-rata produksi 4,0 ton GKP/ha pada lahan kering dan 5,5 ton GKP/ha pada lahan sawah. Dengan potensi hasil yang demikian, varietas ini dapat memberikan kontribusi nyata terhadap peningkatan produksi padi nasional, ketahanan pangan, dan pendapatan petani.

Varietas ini sudah banyak dimanfaatkan oleh penangkar benih dan petani terutama pada lahan kering, atau lahan sawah dengan irigasi sederhana.

Situ Bagendit variety is one of the upland rice varieties, but it ables to grow well in wetland systems. The plant height is about 99-105 cm; with life cycle is around 110-120 days after sowing (HSS). Situ Bagendit variety has slender grain shape, hull grain is bright yellow in color, and with 1000 filled grain weight is 27.5 grams. The productive tiller is about 12-13 stems / clump.

This variety is resistant to blast disease, somewhat resistant to leaf blight disease, and resistant to tungro disease. It adapts either in upland areas or in wetland areas. This variety produces fluffier rice texture, the average production of 4.0 tons of harvesting dry grain (GKP) ha⁻¹ in dry land and 5.5 tons of GKP ha⁻¹ in wetland systems. With such potential results, this variety can significantly contribute to increasing national rice production, food security and farmers' income.

This variety has been used by the seed producers and farmers, especially in upland or in traditionally irrigated wetland paddy.

19. Padi Hibrida Varietas Hipa-5 Ceva *Hipa- 5 Ceva Hybrid Rice Variety*

Inventor :
Satoto, Murdani Direja,
Yudistira Nugraha, Sudibyo T. W. Utomo

Balai Besar Penelitian Tanaman Padi
Indonesian Center for Rice Research

Status Perlindungan HKI :
Pendaftaran Varietas No. 27/PPVHP/2008
IPR Protection Status:
Variety Registration No. 27/PPHVP/2008



Padi hibrida Hipa-5 Ceva merupakan padi hibrida yang dirakit Balai Besar Penelitian Tanaman Padi (BB Padi) bekerjasama dengan Pemerintah Daerah Provinsi Jawa Tengah. Varietas yang memiliki kode persilangan A1/R32 dan berasal dari tetua jantan (restorer) R32 yang diperoleh dari *International Rice Research Institute (IRRI)*.

Berdasarkan Uji Multi Lokasi (UML) menunjukkan bahwa Hipa-5 Ceva memiliki potensi produksi 10,0 ton/ha. Varietas ini memiliki kadar amilosa 23,5% dengan tekstur nasi pulen, rasa nasi enak, beraroma wangi, dan rendemen giling sebesar 63%.

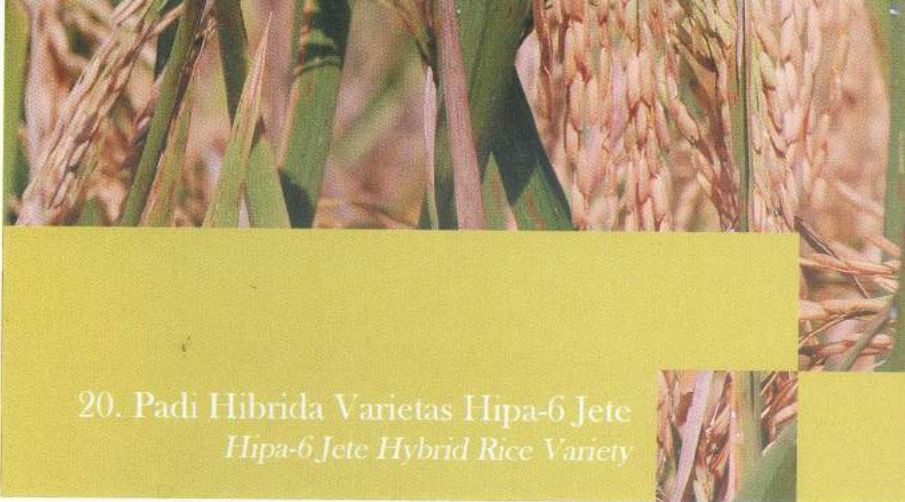
Varietas ini tahan terhadap Wereng Batang Coklat (WBC) biotipe 2, agak rentan terhadap Hawar Daun Bakteri (HDB) strain IV dan strain VIII, agak tahan terhadap tungro serta bersifat spesifik lokasi yaitu akan memperlihatkan gejala heterosis maksimal pada daerah-daerah yang sesuai.

Produksi benih F1 hibrida varietas Hipa-5 Ceva ini siap dilisensikan untuk dikembangkan oleh pihak swasta.

The hybrid rice Hipa- 5 Ceva is a hybrid rice engineered by the researchers of Indonesian Center for Rice Research in collaboration with the Government of Central Java Province. The variety that has the crossbreeding code A1/R32 and comes from R32 restorer obtained from the International Rice Research Institute. Based from Multi Location Test (MLT) Hipa- 5 Ceva has production potency 10,0 ton/ha. This variety comprises 23.5% amylose, good-tasting rice texture, scent aroma, and 63% milling recovery.

This variety is resistant to *Nilaparvata lugens* (brown planthopper) biotype 2, quite resistant to bacterial leaf blight strain IV and strain VIII, quite resistant to tungro and has specific location characteristics, i.e. showing maximal heterosis in suitable areas.

The F1 seed production of hybrid variety Hipa- 5 Ceva is ready to be licensed to be developed by private parties.



20. Padi Hibrida Varietas Hipa-6 Jete *Hipa-6 Jete Hybrid Rice Variety*



Inventor :
Satoto, Murdani Direja,
Yudistira Nugraha, Sudibyo T.W. Utomo

Balai Besar Penelitian Tanaman Padi
Indonesian Center for Rice Research

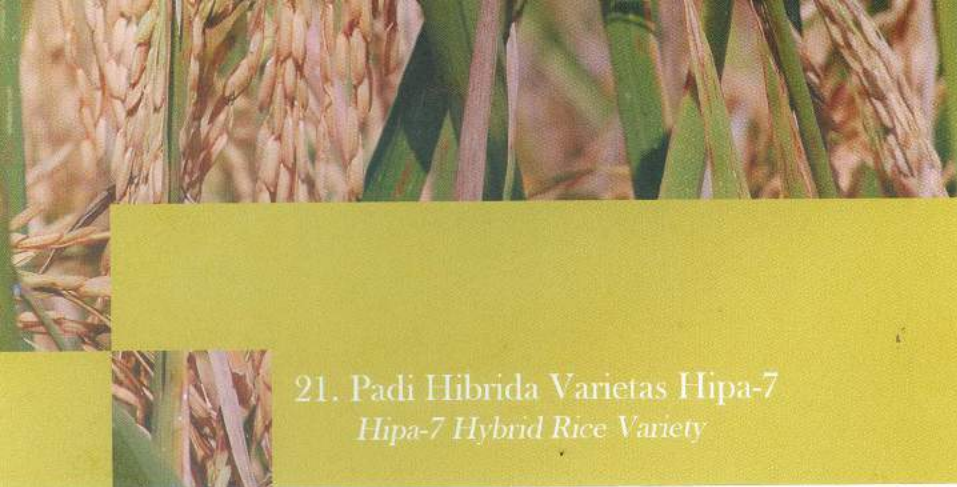
Status Perlindungan HKI :
Pendaftaran Varietas No. 28/PPVHP/2008
IPR Protection Status :
Variety Registration No. 28/PPHVP/2008

Padi Varietas Hibrida Hipa-6 Jete yang memiliki kode persilangan A2/R17 dan berasal dari restorer asli Indonesia. Varietas yang dirilis tahun 2007 ini dirancang khusus sesuai dengan agroklimat di wilayah Jawa Tengah. Namun varietas ini agak rentan terhadap penyakit HDB strain IV dan VIII, serta rentan terhadap WBC biotipe 2 dan virus tungro. Seperti halnya varietas Hipa-5 Ceva, varietas ini juga memiliki sifat spesifik lokasi.

Berdasarkan UML, menunjukkan bahwa Hipa-6 Jete memiliki potensi produksi 11,17 ton/ha. Varietas ini memiliki kadar amilosa sebesar 21,7% dengan tekstur nasi pulen dan tidak beraroma. Tingkat produksi tersebut tertinggi yang pernah dicapai di Indonesia, bahkan mendekati produksi padi hibrida China yang mampu mencapai 15 ton GKG. Varietas ini juga siap dilisensikan kepada pihak swasta.

The rice variety is Hipa- 6 Jete that has the crossbreeding code A2/R17 and comes from indigenous Indonesian restorers. The variety released in 2007 was specifically designed to be suitable with the agroclimate in Central Java region. However, this variety is rather susceptible to *Nilaparvata lugens* (Brown planthopper) biotype 2 and tungro virus. Like the Hipa-5 Cava variety, this variety is also specific location.

Based on the data from MLT, Hipa- 6 Jete has production potency 11,17 ton/ha. This variety comprises 21.7% amylose, good-tasting rice texture, without scent aroma. The production level is the highest production level ever yielded in Indonesia, even close it is close to that of Chinese hybrid paddy capable of producing 15 tons GKG. This variety is also ready to be licensed to private parties.



21. Padi Hibrida Varietas Hipa-7 *Hipa-7 Hybrid Rice Variety*

Inventor :

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Yudhistira N., Agus G., Yuni W.

Balai Besar Penelitian Tanaman Padi
Indonesian Center for Rice Research

Status Perlindungan HKI : -
IPR Protection Status : -



Padi jenis Hipa 7 merupakan salah satu padi hibrida yang dilepas tahun 2009. Varietas ini berasal dari persilangan A1/R14 dan termasuk dalam golongan Cere dengan umur tanaman mencapai 105 - 120 hari.

Jenis Hipa 7 memiliki bentuk tanaman tegak dengan tinggi sekitar 110 - 118 cm dan memiliki anakan produktif 15 - 22 batang. Padi ini mempunyai bentuk gabah sedang dan berwarna kuning jerami, dengan tekstur nasi pulen serta memiliki kandungan amilosa 22,4%.

Hipa 7 termasuk jenis padi hibrida yang agak tahan rebah dan tingkat kerontokannya sedang. Padi ini memiliki rata-rata hasil mencapai 7,6 ton/ha dengan potensi hasil mencapai 11,4 ton/ha. Dengan potensi tersebut, Hipa 7 lebih unggul 10% dibandingkan Ciherang. Selain itu, Hipa 7 memiliki keunggulan tahan tungro serta dapat beradaptasi luas.

The hybrid rice Hipa- 7 Ceva is a hybrid rice variety, released in 2009. This variety is originated from crossing between A1/R14 and included in Cere group with about 105-120 days old.

Hipa 7 is an upright type variety, 110-118 cm in height and productive tiller 15-22 stems/clump. The shape of the rice grain is medium, and yellow in color, with fluffier texture of cooked rice, and amylose content of 22,4 %.

The variety showed tolerant to lodging and medium grain loss. The average of production is about 7,7 ton/ha with yield potential of 11,4 ton/ha, 10 % higher compared to Ciherang. The other superiorities are tolerant to Tungro and adapt well in wider environmental condition.



22. Padi Hibrida Varietas HIPA 10 *HIPA 10 Hybrid Rice Variety*

Inventors : Satoto, Murdhani Direja,
Sudibyo T. W Utomo, Yuni Widyastuti,
dan Indrastuti A.R.

Balai Besar Penelitian Tanaman Padi
Indonesian Center for Rice Research

Status Perlindungan HKI : 214/PVHP/2010
IPR Protection Status: 214/PVHP/2010

Padi Hipa 10 dapat dipanen pada umur 114 hari, berbatang tegak, tinggi tanaman mencapai 97 cm, dan mempunyai anakan produktif 20 per rumpun.

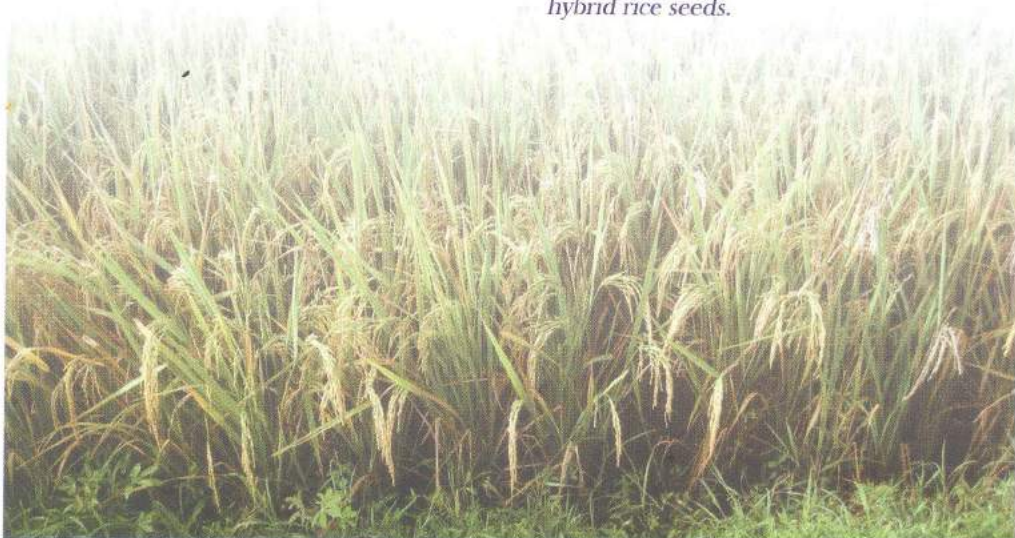
Padi Hipa 10 potensi produksinya tinggi 9,4 ton GKP/ha, tekstur nasi pulen, dan kandungan amilosa 19,7%. Padi ini mampu beradaptasi pada dataran rendah hingga ketinggian 450 m dpl. Padi ini rentan terhadap wereng coklat, agak rentan terhadap penyakit Hawar Daun Bakteri (HDB).

Kehadiran varietas padi hibrida ini berproduksi tinggi ini dapat meningkatkan produktivitas padi nasional dan prospektif dikembangkan oleh agro industri benih dalam rangka program surplus 10 juta ton beras dan mengurangi benih padi hibrida impor.

HIPA 10 rice can be harvested at the age of 114 days, has upright stems, 97 cm plant height, and 20 productive tillers per hill.

HIPA 10 rice has a high production potential of 9.4 tons DHG / ha, fluffier texture, and 19.7% amylose content. This rice is able to adapt on the lowland up to the height of 450 m above the sea level. It is susceptible to brown planthopper, quite susceptible to bacterial leaf blight disease (BDB).

The presence of this high production hybrid rice variety can increase the national rice productivity and is prospective to be developed by the seed industry in order to support the program of 10 million tons of rice surplus and to reduce imported hybrid rice seeds.



23. Padi Hibrida Varietas HIPA 11

HIPA 11 Hybrid Rice Variety



Inventors : Satoto, Murdhani Direja, Sudibyo T. W Utomo, Yuni Widyastuti, dan Indrastuti A.R.

Balai Besar Penelitian Tanaman Padi
Indonesian Center for Rice Research

Status Perlindungan HKI : 15/PVHP/2010
IPR Protection Status : 215/PVHP/2010

Padi Hipa 11 dapat dipanen pada umur 114 hari, berbatang tegak, tinggi tanaman 97 cm, jumlah anakan produktif 20 per rumpun.

Padi Hipa 11 potensi produksi tinggi 10,62 ton GKP/ha, adaptasi baik pada dataran rendah hingga 450 m dpl. Tekstur nasinya pulen, kandungan amilosa 20,14%. Bentuk gabah ramping dan warnanya kuning emas. Tahan penyakit HDB, rentan wereng coklat dan penyakit tungro.

Kehadiran varietas padi hibrida ini berproduksi tinggi ini dapat meningkatkan produktivitas padi nasional dan prospektif dikembangkan oleh agro industri benih dalam rangka program surplus 10 juta ton beras dan mengurangi benih padi hibrida impor.

HIPA 11 rice can be harvested at the age of 114 days, has upright stems, 97 cm plant height, and 20 productive tillers per hill.

HIPA 11 rice with a high production potential of 10.62 tons DHG/ ha adapts well on lowland up to 450 m above the sea level. The rice texture is fluffier with 20.14% amylose content. It has a slender grain shape of golden yellow color. It is resistant to BDB, susceptible to brown planthopper and tungro diseases.

The presence of this high production hybrid rice variety can increase the national rice productivity and is prospective to be developed by the seed industry in order to support the program of 10 million tons of rice surplus and to reduce imported hybrid rice seeds.

24. Padi Hibrida Varietas HIPA 12 SBU *HIPA 12 SBU Hybrid Rice Variety*



Padi Hipa 12 SBU dapat dipanen pada umur 105 hari, berbatang tegak, tinggi tanaman sekitar 104 cm, jumlah gabah 203 butir per malai.

Padi hibrida ini mempunyai potensi hasil yang tinggi mencapai 10,5 t GKP/ha pada musim kemarau (MK) dan 8,9 t GKP/ha di musim hujan (MH). Potensi hasil ini 16,8% lebih tinggi dibandingkan dengan Ciherang. Hipa 12 SBU agak tahan terhadap wereng coklat, bertekstur nasi yang pulen, kandungan amilosa 23,2%, warna beras putih mengkilap, dan beraroma wangi. Agak rentan terhadap penyakit HDB dan rentan terhadap penyakit tungro.

Kehadiran varietas padi hibrida berproduksi tinggi prospektif dikembangkan untuk menunjang program surplus 10 juta ton beras dan prospektif dikembangkan oleh industri benih padi nasional.

Inventors: Satoto, Murdhani Direja,
Sudibyo T. W Utomo, Yuni Widyastuti,
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Balai Besar Penelitian Tanaman Padi
Indonesian Center for Rice Research

Status Perlindungan HKI : 61/Peng/10/2011
IPR Protection Status: 61/Peng/10/2011



HIPA 12 SBU rice can be harvested at the age of 105 days and has upright stems, about 104 cm plant height and 203 grains per panicle.

This hybrid rice has a high yield potential reaching 10.5 t / ha Dry Harvest Grains (DHG) in the dry season and 8.9 t / ha DHG in the rainy season. The potential yield is 16.8% higher than that of Ciherang. HIPA 12 SBU is rather resistant to brown plant hopper, has fluffier texture, amylose content of 23.2%, the color of polished white rice and flavorful fragrance. It can be susceptible to BDB disease and vulnerable to tungro disease.

The presence of high yielding hybrid rice varieties is developed to support the program of 10 million tons rice surplus and is prospective to be developed by the national rice seed industry.

25. Padi Hibrida Varietas HIPA 13

HIPA 13 Hybrid Rice Variety

Padi Hipa 13 dapat dipanen pada umur 105 hari, berbatang tegak, tinggi tanaman 105 cm dan jumlah gabah 206 butir per malai.

Padi Hipa 13 potensi hasilnya tinggi 10.5 t/ha pada musim kemarau dan 9.4 t GKP/ha pada musim hujan. Potensi hasil ini 17,3% lebih tinggi dibandingkan Ciherang, presentase beras kepala 83,9%. Warna berasnya putih mengkilap, tekstur nasi pulen, aromatik, dan amilosa 21,8%. Agak tahan terhadap wereng coklat, agak rentan terhadap dan penyakit tungro.

Kehadiran varietas padi hibrida ini berproduksi tinggi ini dapat meningkatkan produktivitas padi nasional dan prospektif dikembangkan oleh agro industri benih dalam rangka program surplus 10 juta ton beras dan mengurangi benih padi hibrida import.

HIPA 13 rice variety can be harvested at the age of 105 days, has upright stems, 105 cm plant height and 206 grains per panicle.

HIPA 13 rice has a high yield potential of 10.5 t DHG/ ha in the dry season and 9.4 t DHG / ha in the rainy season. The potential yield is 17.3% higher than that of Ciherang with head rice percentage of 83.9%. The rice has glossy white color, fluffier texture, 21.8% amylose and is aromatic. It is quite resistant to brown planthopper, slightly susceptible to tungro.

The presence of this high production hybrid rice variety can increase the national rice productivity and the rice is prospective to be developed by the seed agro industry in order to support the program of 10 million tons of rice surplus and to reduce imported hybrid rice seeds.

Inventors : Satoto, Mirdhani Direja, Sudibyo T. W Utomo, Yuni Widayastuti, dan Indrastuti A.R

Balai Besar Penelitian Tanaman Padi
Indonesian Center for Rice Research

Status Perlindungan HKI : -
IPR Protection Status : -



26. Padi Hibrida Varietas HIPA 14 SBU

HIPA 14 SBU Hybrid Rice Variety

Inventors: Satoto, Murdhani Direja,
Sudibyo T. W Utomo, Yuni Widyastuti,
dan Indrastuti A. R.

Balai Besar Penelitian Tanaman Padi
Indonesian Center for Rice Research

Status Perlindungan HKI : 62/Peng/10/2011
IPR Protection Status : 62/Peng/10/2011



Padi Hipa 14 SBU dapat dipanen pada umur 112 hari, berbatang tegak, tinggi tanaman 112 cm, anakan produktif 16 per rumpun, dan jumlah gabah 185 butir per malai.

Padi hibrida ini potensi hasil tingginya mencapai 12,1 t/ha pada musim kemarau dan 11,8 t/ha di musim hujan. Bentuk gabah ramping, warna beras putih mengkilap, tekstur nasi pulen, aromatik, dengan kandungan amilosa 24,7%. Tahan wereng coklat, dan rentan terhadap penyakit tungro.

Kehadiran varietas padi hibrida berproduksi tinggi prospektif dikembangkan untuk menunjang program surplus 10 juta ton beras dan prospektif dikembangkan oleh industri benih padi nasional.



HIPA 14 SBU rice can be harvested at the age of 112 days, has upright stems, 112 cm plant height, 16 productive tillers per hill, and 185 of grains per panicle.

This hybrid rice has a high yield potential reaching 12.1 t/ha in the dry season and 11.8 t/ha in the rainy season. It has a slender grain shape, glossy white rice, fluffier rice texture, 24.7% amylose content and is aromatic. It is resistant to brown planthopper and susceptible to tungro disease.

The presence of high yielding hybrid rice varieties is developed to support the program of 10 million tons rice surplus and is prospective to be developed by the national rice seed industry.



Inventor :
Marsum Dahlan

Balai Penelitian Tanaman Serealia
Indonesian Cereal Crops Research Institute

Status Perlindungan HKI : PVT 11/Pnrm/TS/2007
IPR Protection Status : PVP 11/Pnrm/TS/07

Jagung Hibrida varietas Bima 1 merupakan hasil persilangan antara sesama galur Mr-14. Varietas ini memiliki tinggi tanaman sekitar 215 cm, umur masak fisiologis 97 hari, umur 50% keluar rambut (*silking*) 54 hari, perakaran baik, keragaman tanaman seragam. Panjang tongkol sekitar 18 cm, warna biji mutiara kuning, bobot 310 gram/1000 biji, jumlah baris dalam tongkol 12-14 baris, baris biji lurus, rata-rata produksi hasil 7,3 ton pipilan kering/ha dengan potensi hasil 9 t/ha.

Keunggulan varietas ini adalah potensi hasil tinggi, beradaptasi baik pada dataran rendah sampai ketinggian 1200 m dpl, agak tahan terhadap penyakit bulai, dan tahan terhadap bercak dan karat daun.

Varietas ini potensial dikembangkan secara komersial oleh agro-industri benih dalam rangka mendukung swasembada jagung.

27. Jagung Varietas Bima-1

Bima-1 Hybrid Maize Variety

Bima 1 hybrid corn variety is cross breeding between family lines of Mr-14. This variety has plant height of about 215 cm, the physiological maturity at about 97 days, and the 50% silking at 54 days. It has good rooting system and the plant performance is uniforms. Cob llength is about 18 cm, with seeds colored yellow pearl and weigh of 1000 seed is about 310 gram. The number of rows in cobs is 12-14 rows, with straight grain lines. The average yield is 7.3 t ha-1 of dry grain and potentially can yield up to 9.0 t dry grain ha-1.

The superiorities of this variety are high yield potential, grows well from lowland to the altitude of 1200 m above sea level, moderately resistant to downy mildew, and resistance to leaf spot and rust.

This variety has potential to be commercialized by the seeds agro-industry in order to support national corn self-sufficiency.



Inventor :

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Indonesian Cereal Crops Research Institute

Status Perlindungan HKI : PVT No. 17/Phm/TS/07
IPR Protection Status : PVP No. 17/Phm/TS/07

28. Jagung Hibrida Varietas

Bima-2 Bantimurung

Bima-2 Bantimurung Hybrid Maize Variety

Balai Penelitian Tanaman Serealia telah berhasil merakit varietas jagung hibrida, yakni Bima-2 Bantimurung yang merupakan hasil persilangan tunggal antara galur B11-209 dan Mr-14. Varietas unggul ini agak toleran terhadap penyakit bulai (*Peronosclerospora maydis*). Keunggulan lainnya ialah pada saat panen daunnya masih hijau dan segar sehingga dapat dimanfaatkan untuk pakan ternak. Varietas Bima-2 Bantimurung mampu berproduksi maksimal mencapai 11 ton/hektar dengan rata-rata produksi sebesar 8,3 ton/hektar. Varietas ini mampu beradaptasi dengan baik pada lahan sub optimal.

A hybrid maize variety, i.e. Bima-2 Bantimurung which is a single crossbreed between lines B11-209 and Mr-14. This superior variety is quite tolerant to downy mildew disease (*Peronosclerospora maydis*). Another special superiority is at the harvesting time, the leaves are still green and fresh hence they can be used for livestock feed. The Bima-2 Bantimurung variety is capable of a maximal production reaching 11 tons/ha with an average production of 8.3 tons/ha. This variety is capable of adapting well on sub-optimal land.

Tinggi tanaman <i>Plant height</i>	± 200 cm
Keseragaman <i>Uniformity</i>	cukup seragam <i>Quite uniform</i>
Kerebahan <i>Lodging</i>	Tahan rebah <i>Resistant to lodging</i>
Ukuran tongkol <i>Cob Size</i>	Besar dan panjang / <i>Large and long ± 21 cm</i>
Bentuk tongkol <i>Cob Shape</i>	Silindris <i>Cylindrical</i>
Warna biji <i>Grain Color</i>	Kuning <i>Yellow</i>
Tipe biji <i>Grain type</i>	Semi mutiara <i>Semi Flint</i>
Bobot <i>Weight/</i>	± 378 gr/ 1000 butir/grains
Rata - rata hasil <i>Average Yield</i>	8,51 ton/ha pipilan kering/ <i>dried shelled grain</i>
Potensi Hasil <i>Yield Potency</i>	11,00 ton/ha pipilan kering/ <i>dried shelled grain</i>



Inventor :
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Muzdalifah Isuaini, Achmad Muliadi, Nuning A. Subekti,
M. Yasin H.G., Marsum Dahlan.,

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Status Perlindungan HKI : PVT No. 18/Pnrm/TS/2007
IPR Protection Status : PVP No. 18/Pnrm/TS/07

Varietas jagung hibrida Bima-3 Bantimurung yang merupakan hasil persilangan tunggal antar galur Nei-9008 dan Mr-14. Galur Nei-9008 adalah galur S-9 introduksi Pemerintah Thailand. Sedangkan Mr-14 adalah galur SW3-3.

Keunggulan varietas Bima-3 ini ialah berumur ± 100 hari dan tahan terhadap penyakit bulai. Potensi hasil varietas yang memiliki warna biji jingga ini mencapai 10 ton/hektar yang dapat dikembangkan di lahan kurang subur.

Tinggi tanaman <i>Plant height</i>	± 200 cm
Keseragaman <i>Uniformity</i>	cukup seragam <i>Uniform</i>
Kerebalan <i>Lodging</i>	Tahan rebah <i>Resistant to lodging</i>
Ukuran tongkol <i>Cob Size</i>	Besar dan panjang / <i>Large and long ± 21 cm</i>
Bentuk tongkol <i>Cob Shape</i>	Silindris <i>Cylindrical</i>
Warna biji <i>Grain Color</i>	Kuning <i>Orange</i>
Tipe biji <i>Grain type</i>	Semi mutiara <i>Semi Flint</i>
Bobot <i>Weight</i>	± 359 gr/ 1000 butir/ <i>grains</i>
Rata - rata hasil <i>Average Yield</i>	8,27 ton/ha pipilan kering/ <i>dried shelled grain</i>
Potensi Hasil <i>Yield Potency</i>	11,00 ton/ha pipilan kering/ <i>dried shelled grain</i>

29. Jagung Hibrida Varietas

Bima-3 Bantimurung

Bima-3 Bantimurung Hybrid Maize Variety

A hybrid maize variety, i.e. Bima-3 Bantimurung which is a single crossbreed between lines Nei-9008 and Mr-14. Line Nei-9008 is line S-9 introduced by the Thailand Government while Mr-14 is line SW3-3.

The superiority of Bima- 3 variety is its short harvested age of + 100 days and resistant to Downy Mildew disease. The production potency of this orange grain variety reaches 10 tons/ ha and can be planted on less fertile soil.



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Bunga

Balai Penelitian Tanaman Serealia
Indonesian Cereal Crops Research Institute

Status Perlindungan HKI : PVT 17/PVHP/2008
IPR Protection Status : PVP 17/PVHP/2008

30. Jagung Varietas Bima-4 *Bima-4 Hybrid Maize Variety*

Jagung varietas Bima 4 merupakan hasil persilangan antara galur G 180 dengan galur Mr-14. Varietas ini memiliki tinggi tanaman sekitar 212 cm, batang sedang dan tegak berwarna hijau, umur masak fisiologis ± 102 hari, umur 50% keluar rambut (*silking*) ± 59 hari, perakaran sangat baik, tahan rebah, keragaman tanaman seragam. Panjang tongkol ± 20 cm, tipe biji mutiara berwarna jingga, bobot biji sekitar 300 gram/1000 biji, jumlah baris 12-14 baris/tongkol, baris biji lurus, rata-rata produksi hasil 9,6 ton/ha pipilan kering dengan potensi produksi mencapai 10 t/ha.

Keunggulan jagung varietas Bima 4 cepat panen, hasil tinggi, umur berbunga lebih cepat, tahan karat dan bercak daun. Batang saat panen masih hijau (*stay green*) sehingga dapat digunakan sebagai pakan ternak.

Varietas ini potensial dikembangkan secara komersial oleh agro-industri benih dalam rangka mendukung swasembada jagung.

Bima 4 hybrid maize variety is cross breeding lines between G 180 and Mr-14. This variety has a plant height of 212 cm, medium stems are upright and green, the physiological maturity is about 102 days, and the 50% silking time is about 59 days. It has very good rooting system, resistant to lodging, and the plant performance is uniform. The cob length is about 20 cm, with the type of seed is pearls orange and seed weight of 1000 seeds around 300 g. The number of row is 12-14 rows cob-1, with grain rows straight. The average production is 9.6 t ha-1 of dry grain and potential production reaches 10.0 t ha-1.

The advantages of Bima 4 variety are high yielding variety, early flowering, early to harvest, resistant to rust and leaf spot. The stem remains green at harvest, so it can be used as cattle feed.

This variety has potential to be commercialized by the seeds agro-industry in order to support national corn self-sufficiency.



Inventor :

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IPR Protection Status : PVP No. 17/Pnrm/TS/07

28. Jagung Hibrida Varietas

Bima-2 Bantimurung

Bima-2 Bantimurung Hybrid Maize Variety

Balai Penelitian Tanaman Serealia telah berhasil merakit varietas jagung hibrida, yakni Bima-2 Bantimurung yang merupakan hasil persilangan tunggal antara galur B11-209 dan Mr-14. Varietas unggul ini agak toleran terhadap penyakit bulai (*Peronosclerospora maydis*). Keunggulan lainnya ialah pada saat panen daunnya masih hijau dan segar sehingga dapat dimanfaatkan untuk pakan ternak. Varietas Bima-2 Bantimurung mampu berproduksi maksimal mencapai 11 ton/hektar dengan rata-rata produksi sebesar 8,3 ton/hektar. Varietas ini mampu beradaptasi dengan baik pada lahan sub optimal.

A hybrid maize variety, i.e. Bima-2 Bantimurung which is a single crossbreed between lines B11-209 and Mr-14. This superior variety is quite tolerant to downy mildew disease (*Peronosclerospora maydis*). Another special superiority is at the harvesting time, the leaves are still green and fresh hence they can be used for livestock feed. The Bima-2 Bantimurung variety is capable of a maximal production reaching 11 tons/ha with an average production of 8.3 tons/ha. This variety is capable of adapting well on sub-optimal land.

Tinggi tanaman <i>Plant height</i>	± 200 cm
Keseragaman <i>Uniformity</i>	cukup seragam <i>Quite uniform</i>
Kerebahan <i>Lodging</i>	Tahan rebah <i>Resistant to lodging</i>
Ukuran tongkol <i>Cob Size</i>	Besar dan panjang / <i>Large and long ± 21 cm</i>
Bentuk tongkol <i>Cob Shape</i>	Silindris <i>Cylindrical</i>
Warna biji <i>Grain Color</i>	Kuning <i>Yellow</i>
Tipe biji <i>Grain type</i>	Semi mutiara <i>Semi Flint</i>
Bobot <i>Weight/</i>	± 378 gr/ 1000 butir/ <i>grains</i>
Rata - rata hasil <i>Average Yield</i>	8,51 ton/ha pipilan kering/ <i>dried shelled grain</i>
Potensi Hasil <i>Yield Potency</i>	11,00 ton/ha pipilan kering/ <i>dried shelled grain</i>



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Balai Penelitian Tanaman Sereal
Indonesian Cereal Crops Research Institute

Status Perlindungan HKI : PVT 18/PVHP/2008
IPR Protection Status : PVP 18/PVHP/2008

31. Jagung Varietas Bima-5 *Bima-5 Hybrid Maize Bima Variety*

Jagung varietas Bima 5 merupakan hasil persilangan antara galur G 180 dengan galur Mr-14. Varietas ini memiliki tinggi tanaman sekitar 205 cm, umur masak fisiologis sekitar 103 hari, umur 50% keluar rambut (*silking*) $\pm$ 60 hari, perakaran sangat baik, keragaman tanaman seragam. Panjang tongkol $\pm$ 19 cm, tipe biji mutiara berwarna jingga, bobot biji $\pm$ 277 gram/1000 gram, jumlah baris 12-14 baris/tongkol, baris biji lurus, rata-rata produksi 9,3 ton pipilan kering/ha dengan potensi produksi mencapai 11 t/ha.

Keunggulan varietas ini adalah produksi tinggi, tongkol seragam, potensi hasil tinggi, tahan karat dan bercak daun, batang saat panen masih hijau (*stay green*) sehingga dapat digunakan sebagai pakan ternak.

Varietas ini potensial dikembangkan secara komersial oleh agro-industri benih dalam rangka mendukung swasembada jagung.

Bima 5 corn variety is cross breeding lines between G 180 and Mr-14. This variety has a plant height of about 205 cm, the physiological maturity around 103 days, and the 50% silking time about 60 days. It has very fine rooting system and uniform crop performances. The cob size is 19 cm, pearls orange-colored type of grain, and weigh of 1000 dry seeds is about 277 g. The number of rows is 12-14 rows/cob, with grain lines straight. The average production is 9.3 t dry grain ha⁻¹ with the potential production reaches 11.0 t ha⁻¹.

The advantages of this variety are a high yielding variety, cob uniform, resistant to rust and leaf spot. Stem remains green at harvest so it can be used as cattle feed.

This variety has potential to be commercialized by the seeds agro-industry in order to support national corn self-sufficiency.



Inventor :

Andi Takdir M., R. Neni Iriani, M. Azrai, Mustalifah I.,
Sigit Budi S., M. Yasin, Nuning Subekti, Amin Nur

Balai Penelitian Tanaman Serealia

Indonesian Cereal Crops Research Institute

Status Perlindungan HKI : PVT No. 19/PVHP/2008

IPR Protection Status : PVP No. 19/PVHP/2008

32. Jagung Varietas Bima-6 *Bima-6 Hybrid Maize Variety*

Jagung varietas Bima 6 merupakan hasil persilangan antara galur Mr 14 dengan galur N 150. Varietas ini memiliki tinggi tanaman sekitar 202 cm, umur masak fisiologis sekitar 104 hari, umur 50% keluar rambut (*silking*) $\pm$ 61 hari, perakaran sangat baik, keragaman tanaman seragam. Panjang tongkol $\pm$ 20 cm, tipe biji semi mutiara berwarna jingga, jumlah baris/tongkol 12-14 baris, baris biji lurus. Rata-rata produksi 9 ton pipilan kering/ha dengan potensi produksi mencapai 11 t/ha.

Keunggulan Varietas ini adalah berdaya hasil tinggi, mampu berproduksi pada lahan yang kurang subur dan memiliki daun yang masih hijau (*stay green*) hingga saat panen, sehingga dapat dimanfaatkan untuk pakan ternak.

Varietas ini potensial dikembangkan secara komersial oleh agroindustri tanaman pangan/pelaku usaha bidang pertanian.

Bima 6 variety of corn is a cross breeding lines between Mr-14 and N 150. This variety has plant height of about 202 cm, the physiological maturity around 104 days, and the age of 50% silking time around 61 days. It has very fine rooting systems and uniform crop performance. Cob length is about 20 cm and type of seed is pearl semi-orange. The number of rows is 12-14 rows cob⁻¹, with straight grain lines. Average production is about 9.0 t/ha of dry grain with production potential reaches 11.0 t/ha.

The advantages of this variety are high yielding variety, tolerance to less fertile land and the leaves are still green at harvest, so it can be used for animal feed.

This variety has potential to be commercialized by the seeds agro-industry in order to support national corn self-sufficiency.



Inventors : M. Azrai, Sri Sunarti, Muzdalifah Isnaini,
A. Takdir, dan Makkulawu

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Status Perlindungan HKI : 20/Peng/03/2010
IPR Status Protection : 20/Peng/03/2010

33. Jagung Hibrida Varietas Bima-7 *Bima-7 Hybrid Maize Variety*

A hybrid maize variety, i.e. Bima-2 Bantimurung which is a single crossbreed between lines B11-209 and Mr-14. This superior variety is quite tolerant to downy mildew disease (*Peronosclerospora maydis*). Another special superiority is at the harvesting time, the leaves are still green and fresh hence they can be used for livestock feed. The Bima-2 Bantimurung variety is capable of a maximal production reaching 11 tons/ha with an average production of 8.3 tons/ha. This variety is capable of adapting well on sub-optimal land.

Balai Penelitian Tanaman Serealia telah berhasil merakit varietas jagung hibrida, yakni Bima-2 Bantimurung yang merupakan hasil persilangan tunggal antara galur B11-209 dan Mr-14. Varietas unggul ini agak toleran terhadap penyakit bulai (*Peronosclerospora maydis*). Keunggulan lainnya ialah pada saat panen daunnya masih hijau dan segar sehingga dapat dimanfaatkan untuk pakan ternak. Varietas Bima-2 Bantimurung mampu berproduksi maksimal mencapai 11 ton/hektar dengan rata-rata produksi sebesar 8,3 ton/hektar. Varietas ini mampu beradaptasi dengan baik pada lahan sub optimal.



Inventors : Muhammad Azrai, Sri Sunarti, Aviv Andraini,
Amin Nur dan Andi Takdir Makkulawu

Balai Penelitian Tanaman Serealia
Indonesian Cereal Crops Research Institute

Status Perlindungan HKI : 131/PVHP/2010
IPR Protection Status : 131/PVHP/2010

34. Jagung Hibrida Varietas BIMA-8 *Bima-8 Hybrid Maize Variety*

Jagung Bima 8 berumur genjah 88 hari, tinggi tanaman 187 cm, batang besar dan kuat, bentuk tongkol panjang dan silindris, barisan biji lurus dan rapat. Jumlah barisan biji 14 - 16 baris per tongkol. Warna biji adalah orange, bertipe mutiara, bobot 316 g/1000 butir pada kadar air 15%.

Potensi hasilnya tinggi mencapai 11,7 ton pipilan kering/ha. Kandungan karbohidrat 73,2 %, protein 8,6%, dan lemak sekitar 5,1%. Tahan rebah, dan stay green saat panen dapat digunakan untuk pakan ternak. Toleran terhadap penyakit bulai (*Peronosclerospora maydis*), karat daun (*Puccinia sorghi*), dan bercak daun (*Helminthospororium maydis*).

Kehadiran jagung hibrida Bima 8 dapat menjadi alternatif bagi petani untuk mendapatkan hasil yang tinggi. Jagung ini potensial dikembangkan oleh industri benih dalam rangka mensukseskan program swasembada jagung.

Bima 8 is early ripening maize of 88 days old, has 187 cm plant height, a big and strong stems, a long and cylindrical shape cob, straight and dense grain rows and 14-16 grain rows per cob. The grain color is orange of pearl type and the weight is 316 g/1000 grains with 15% moisture content.

*The high potential yield reaches 11.7 tons non-cob dry grains / ha. It contains 73.2% carbohydrate, 8.6% protein, and around 5.1% fat. It is resistant to fall, and stay green at harvest so the waste can be used for animal feed. It is tolerant to downy mildew disease (*Peronosclerospora maydis*), leaf rust (*Puccinia sorghi*), and leaf spot (*Helminthospororium maydis*).*

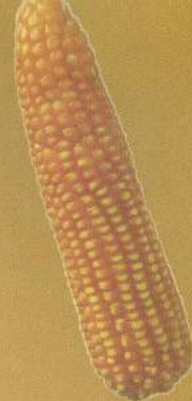
The presence of Bima 8 hybrid maize can be an alternative for farmers to obtain high yields. This maize is potential to be developed by the seed industry in order to succeed the maize self-sufficiency program.



Inventors : Andi Takdir Makkulawu, Neny Iriany M, Muzdalifah Isnaini, Sri Sunarti dan Muhammad Azrai

Balai Penelitian Tanaman Serealia
Indonesian Cereal Crops Research Institute

Status Perlindungan HKI : 20/Peng/11/2010
IPR Status Protection : 20/Peng/11/2010



Jagung Bima 9 berumur genjah sekitar 95 hari, tinggi tanaman 199 cm. Panjang tongkol sekitar 24 cm dan berbentuk silindris. Tanaman sangat seragam, memiliki batang yang besar dan kokoh sehingga tahan roboh. Baris biji antara 14-16 baris per tongkol dan biji bertipe mutiara.

Potensi hasilnya tinggi 13,4 ton pipilan kering/ha, tahan penyakit bulai, agak toleran *Helmintosporium*, dan penyakit karat daun. Jagung Bima 9 mempunyai kandungan karbohidrat sekitar 74,2%, protein sekitar 11,9%, dan lemak 6,6%.

Kehadiran varietas jagung ini dapat menjadi alternatif bagi petani untuk mendapatkan hasil yang tinggi. Jagung ini potensial dikembangkan oleh industri benih dalam rangka mensukseskan program swasembada jagung nasional.

35. Jagung Hibrida Varietas BIMA-9

Bima-9 Hybrid Maize Variety

Bima 9 is early ripening maize of about 95 days old and 199 cm in height. The cob is about 24 cm long and cylindrical. The plants are very uniform, have large and sturdy stems so that they are resistant to fall and 14-16 grain rows per cob of pearl type grains.

*It has a high yield potential of 13.4 tons of con-free dry grains / ha, is resistant to downy mildew disease, quite tolerant to *Helmintosporium*, and leaf rust diseases. It contains about 74.2% carbohydrate, 11.9% protein, and 6.6% fat.*

The presence of this maize variety can be an alternative for farmers to obtain high yields. This corn is potential to be developed by the seed industry in order to succeed the national maize self-sufficiency program.





36. Jagung Hibrida Bima-12Q *Bima-12Q Hybrid Maize Variety*

Inventors : Firdaus Kasim, Made Jana Mejaya,
Abd. Rahman, Marcia B. Pabendon, dan AT. Dewi

Balai Penelitian Tanaman Serealia
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Status Perlindungan HKI : 67/Peng/12/2011
IPR Protection Status : 67/peng/12/2011

Jagung Hibrida Bima 12Q tergolong genjah dengan umur panen 90-95 hari. Potensi hasilnya tinggi mencapai 9-10 ton/ha, kandungan protein tinggi cocok untuk meningkatkan kesehatan masyarakat terutama anak balita danantisipasi penyakit busung lapar (kwashiorkor). Kandungan asam amino lisin dan triptofan dua kali lebih tinggi dari jagung biasa. Jagung ini dapat ditanam pada ketinggian hingga 800 m dpl.

Kehadiran jagung hibrida Bima 12 Q dapat menjadi alternatif untuk mengatasi kekurangan gizi pada masyarakat dan busung lapar pada daerah miskin. Prospektif dikembangkan di wilayah Indonesia timur dan dapat diolah menjadi susu jagung.

Bima 12Q is early ripening maize of 90-95 days old at harvest. The high yield potential reaches 90-10 tons / ha with high protein content suitable to improve the public health, especially children under five and anticipate malnutrition (kwashiorkor). The amino acids content namely lysine and tryptophan are two times higher than the common corn. This corn can be planted on up to 800 m above the sea level.

The presence of Bima 12Q hybrid maize can be an alternative to overcome malnutrition in the community and in poor areas. It is prospective to be developed in eastern Indonesia and can be processed into maize milk.





Jagung Bima 13Q tergolong berumur genjah yang dapat dipanen 90-95 hari. Potensi hasilnya tinggi mencapai 9-10 ton/ha, kandungan nutrisi dan protein tinggi dicerminkan oleh kandungan asam amino lisin 0,460% dan triptofan 0,090% atau dua kali lebih tinggi dari jagung biasa. Cocok untuk meningkatkan produksi dan kualitas telur dan daging unggas. Mampu beradaptasi baik pada ketinggian tempat hingga 800 m dpl.

Kehadiran jagung hibrida Bima 13Q dapat menjadi alternatif untuk mengatasi kekurangan gizi pada masyarakat dan busung lapar pada daerah miskin, meningkatkan kualitas telur dan daging unggas. Prospektif dikembangkan di wilayah Indonesia timur dan dapat diolah menjadi susu jagung, maupun pakan ternak bernutrisi tinggi.

Bima 13Q is early ripening maize that can be harvested on 90-95 days old. The high yield potential reaches 9-10 tons / ha and the nutrient and high protein contents are reflected by the amino acid lysine and tryptophan of 0.460% 0.090% respectively or twice higher than the common maize. It is suitable for improving the production and quality of poultry eggs and meat. It can adapt well to the altitude of up to 800 m above the sea level.

The presence of Bima 13Q hybrid maize can be an alternative to overcome malnutrition in the community and in poor areas, improve the quality of poultry eggs and meat. It is prospective to be developed in eastern part of Indonesia and can be processed into corn milk and highly nutritious cattle feed.

37. Jagung Hibrida Bima-13Q *Bima-13Q Hybrid Maize Variety*

Inventors : M. Yasin HG

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Status Perlindungan HKI : -
IPR Protection Status : -





38. Ubi Jalar Varietas Beta 1 *Beta 1 Sweet Potato Variety*

Inventor :

M. Jusuf, St. A. Rahayuningsih,
Tinuk S.W, Joko Restuono, Gatot Santoso, Erliana Ginting

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Beta-1 adalah varietas ubi jalar yang memiliki kandungan betakaroten cukup tinggi, melebihi kandungan betakaroten sebesar $12.032 \mu\text{g}/100 \text{ g}$ umbi bahkan lebih tinggi dari kadar β -karoten pada wortel. Tingginya kandungan betakaroten dapat diduga dari warna daging umbinya yang berwarna orange. Potensi hasil varietas ini mencapai $35,7 \text{ ton/ha}$ dengan umur panen 4,0-4,5 bulan.

Keunggulan varietas ubi jalar Beta 1 memiliki potensi produksi tinggi dan kandungan beta karoten tinggi.

Varietas ubi jalar yang kaya β -karotin ini potensial dikembangkan secara komersial oleh agroindustri pangan dalam meningkatkan asupan pro-vitamin A bagi masyarakat.

Beta-1 is a sweet potato variety possessing a relatively high β -carotene content, more than the β -carotene as much as $12.032 \mu\text{g}/100 \text{ g}$ tubers, eventually higher than β -carotene content in carrots. The high β -carotene content is assumed from the flesh of the tuber that has an orange color. The potential yield of this variety reaches 35.7 tons/ha with the harvesting age of 4.0-4.5 months.

The sweet potato Beta 1 has superiorities in high productivity and β -carotene content.

This rich in β -carotene sweet potato variety is potential to be commercially developed by food agro-industries in improving the pro-vitamin A input for the community.

39 Ubi Jalar Varietas Beta 2

Beta 2 Sweet Potato Variety



Beta-2 adalah varietas ubi jalar yang memiliki kandungan betakaroten tinggi, tetapi kandungannya lebih rendah dibandingkan beta-1. Potensi produksi Beta-2 lebih tinggi dibandingkan Beta-1. Varietas ini banyak dikembangkan di sekitar Malang dan Lumajang.

Keunggulan varietas ubi jalar ini terbilang tinggi dan kandungan beta karoten juga tinggi.

Varietas ubi jalar yang kaya β -karotin ini potensial dikembangkan secara komersial oleh agroindustri pangan dalam meningkatkan asupan pro-vitamin A bagi masyarakat.

Inventor :

M. Jusuf, Tinuk S.W, Joko Restuono, Gatot Santoso

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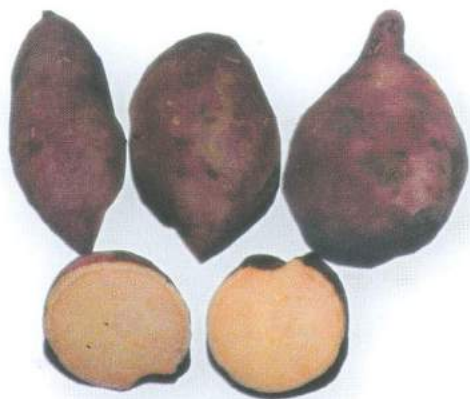
Status Perlindungan HKI : -

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Beta-2 is a sweet potato variety possessing high β -carotene content, but lower than Beta 1. The potential yield is higher compared to that of Beta-1. This variety is developed widely around Malang and Lumajang.

The sweet potato Beta 2 has high productivity and β -carotene content.

This rich of β -carotene sweet potato variety is potential to be developed commercially by food agro-industries in improving the pro-vitamin A input for the community.





40. Ubi Jalar Varietas Antin-1 *Antin-1 Sweet Potato Variety*

Inventor :
M. Jusuf, Tinuk S.W, Joko Restuono,
Gatot Santoso

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Ubi Jalar Antin -1 merupakan hasil persilangan antara varietas lokal Samarinda dari Blitar dengan Kinta varietas lokal Papua. Varietas ini toleran terhadap kekeringan, mengandung zat antosianin 33,89 mg/100 g dan memiliki corak warna yang atraktif yakni berwarna ungu bercampur putih pada daging umbi. Potensi hasil mencapai 33,2 ton /ha dengan umur panen 4 – 4,5 bulan.

Keunggulan varietas ini memiliki potensi hasil tinggi dan toleran terhadap kekeringan. Corak warna umbi ungu bercampur putih yang atraktif cocok di buat menjadi keripik. Mengandung zat antosianin sebagai antioksidan untuk menangkal radikal bebas yang menyebabkan penuaan, kanker dan penyakit-penyakit degeneratif lainnya. Antosianin juga memiliki kemampuan sebagai anti-mutagenik dan anti-karsinogenik terhadap mutagen dan karsinogen yang terdapat pada bahan pangan dan olahannya, mencegah gangguan pada fungsi hati, anti-hipertensi dan menurunkan kadar gula darah (*anti-hiperglisemik*).

Varietas ubi jalar ini berpotensi dikembangkan secara komersial oleh industri pangan dan olahan termasuk untuk penyediaan bahan baku farmasi.

Sweet potato Antin -1 variety is a crossbreeding product between Samarinda local variety from Blitar and Papua local variety Kinta. This variety is resistant to droughts, contains 33.89 mg antocyanine/ 100 g and has an attractive color pattern, i.e. purple and white flesh. The potential yield reaches 33.2 tons/ha with the harvesting age of 4.0-4.5 months.

The advantages of this sweet potato are has high potential yield, tolerant to drought, attractive color mixture for crisps, and contains antocyanine as an antioxidant. Antocyanine is found in the pigment of purple sweet potatoes functioning as an antioxidant to avoid free radicals causing aging, cancer, and other degenerative diseases. Antocyanine also has the ability as antimutagenic and anticarcinogenic against mutagenes and carcinogenes found in foodstuff and its processed products, preventing the disturbances on the liver functions, anti high blood pressure, and reduce the blood sugar content (anti hyperglysemic).

This sweet potato is potential to be developed commercially by food and food processing industries including the provision of pharmaceutical raw materials.



41. Ubi Jalar Varietas Suku *Suku Sweet Potato Variety*



Inventor : M.Jusuf, I Gin Mok, Lisna Ningsih,
Tjintokohadi, Suluh Pambudi, Khusnul Makhin,
dan Joko Restuono

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Ubi jalar Suku bertipe tanaman kompak, umur panen 4 - 4,5 bulan, warna umbi putih, rasa enak, bahan kering tinggi, warna daging putih, sebagai bahan tepung ubi jalar, cocok ditanam pada lahan tegalan dan sawah.

Keunggulannya potensi hasil tinggi mencapai 30 ton/ha, kadar protein 1,62 %, pati 31,2 %, vitamin C 19,21 mg/100 g, beta karotin tinggi 36.59 mkg/100 g. Varietas ini agak tahan hama boleng (*Cylas formicarius*), tahan hama penggulung daun, agak tahan penyakit kudis (*Sphaceloma batatas*) dan bercak daun (*Cercospora*, sp).

Kehadiran varietas Suku ini dapat sebagai alternatif petani dalam memilih benih ubijalar. Prospektif dikembangkan oleh industri benih tanaman pangan.

Suku sweet potato is compact crop type, age of harvest 4 to 4.5 months, white bulb color, delicious taste, high dry matter, white flesh, sweet potato flour, suitable planted on dry land and rice fields.

*The advantages are high yield potential reaching 30 tonnes / ha, 1.62% protein content, 31.2% starch, 19.21 mg/100 g of vitamin C, high beta carotene 36.59 mkg/100 g. This variety is moderately resistant to boleng pests (*Cylas formicarius*), leaf rolling pest resistant, moderately resistant to kudis disease (*Sphaceloma batatas*) and leaf spot (*Cercospora*, sp).*

The presence of Suku variety can be as an alternative to farmers in selecting sweet potatoes. Prospectively developed commercially by ford crop seed industries.



42. Kacang Hijau Varietas Vima-1 *Vima-1 Green Beans Variety*

Inventor : M.Anwari, Rudi Iswanto,
Rudi Soehendi, Hadi Purnomo dan Agus Supeno

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*Indonesian Legumes and Tuber Crops
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IPR Protection Status : 24/PVHP/2010

Biji kacang hijau Vima-1 (*Vigna sinensis* - Malang) kulit bijinya lunak, daging biji cepat empuk ketika direbus, dan tekstur bijinya sesuai dengan preferensi pengusaha makanan (bubur kacang hijau, bakpia, dan onde-onde).

Keunggulannya potensi hasil tinggi 1,76 t/ha, umur genjah 57 hari, dan tahan penyakit embun tepung, biji mudah dipelihara dan dipanen, kandungan protein tinggi 28,0%, lemak rendah 0,4 %, dan pati tinggi 67,6 %.

Kehadiran varietas Vima 1 ini dapat sebagai alternatif petani dalam memilih benih unggul kacang hijau. Prospektif dikembangkan oleh industri benih tanaman pangan.

Vima-1 mung bean (Vigna sinensis - Delhi) having soft seed skin , tender seed when boiled, and the texture of the seeds in accordance with the preferences of food industries (pureed green beans, bakpia, and dumplings).

The advantages are high yield potential of 1.76 tons /ha, short age of 57 days old, powdery mildew disease resistance, easy to manage and harvest seeds, high protein content of 28.0%, 0.4% low-fat, high starch of 67.6% .

The presence of this Vima1 variety can be as an alternative to farmers in choosing the superior seeds of mung beans. Prospectively developed commercial by food crop seed industries.



43. Kacang Tanah Varietas Talam 1 *Talam-1 Peanuts Variety*



Inventor : Astanto Kasno, Trustinah, Joko Purnomo, dan Novita N.

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Kacang Tanah Talam 1 merupakan silangan antara varietas Jerapah dengan varietas tahan *A. flavus* ICGV 91283, dapat dipanen umur 90 hari, tinggi 42 cm, dengan jumlah polong 27 polong per tanaman.

Keunggulannya potensi hasil tinggi mencapai 3,2 t/ha, kadar protein 26,3 %, lemak 45,4 %, lemak esensial 44,0 % dari lemak total, agak tahan (pH 4,5 - 5,6), tahan penyakit layu bakteri, agak tahan karat daun dan tahan *A. flavus*.

Kehadiran varietas Talam 1 ini dapat sebagai alternatif petani dalam memilih benih unggul kacang tanah. Prospektif dikembangkan oleh industri benih tanaman pangan.



The presence of Talam 1 variety can be as an alternative to farmers in selecting seed of groundnuts. Prospectively developed commercially by food crop seed industry.

Talam 1 peanut variety is a cross between Jerapah variety with variety resistant to *A. flavus* ICGV 91283, harvesting at 90 days of age, height 42 cm, with the number of pods reaching 27 pods per crops.

The advantages are high yield potential of 3.2 tons / ha, 26.3% protein content, fat 45.4%, 44.0% essential fats from total fat, moderately resistant (pH 4.5 to 5.6), bacterial wilt disease resistance, and moderately resistant to leaf rust and *A. flavus*.



44. Kacang Tanah Varietas Hypoma-1 *Hypoma-1 Peanuts Variety*

Kacang tanah Hypoma 1 dapat dipanen umur 90 hari, tipe Spanish (dua biji/polong), ukuran polong dan biji sedang, kulit ari biji berwarna rose, dapat ditanam pada tipe iklim D.

Keunggulannya potensi hasil mencapai 3,70 t/ha polong kering, tahan penyakit bercak dan karat daun, agak tahan terhadap penyakit layu bakteri (*Ralstonia solanacearum*), jumlah polong banyak, dan ukuran biji besar.

Kehadiran varietas Hypoma 1 ini dapat sebagai alternatif petani dalam memilih benih unggul kacang tanah. Prospektif dikembangkan oleh industri benih tanaman pangan.

Inventor : Joko Purnomo, Novita Nugrahani, dan Astanto Kasno.

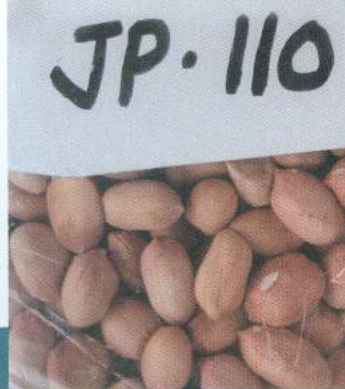
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IPR Protection Status : -

Hypoma 1 peanut can be harvested at 90 days old, Spanish type (two seeds / pods), medium pod and seed size, the rose-colored seed epidermis, can be grown on climate type D.

*The advantages are yield potential achieving 3.70 tons / ha of dry pods, spot and leaf rust disease resistance, moderately resistant to bacterial wilt disease (*Ralstonia solanacearum*), number of pods is numerous, and large seed size.*

The presence of Hypoma 1 variety can be as an alternative to farmers in selecting superior seed peanuts. Prospectively developed by food crop seed industries.



45. Kacang Tanah Varietas Hypoma2 *Hypoma-1 Peanuts Variety*

Inventor : Joko Purnomo, Novita Nugrahani, dan Astanto Kasno.

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Kacang tanah Hypoma 2 Umur masak sekitar 90 hari, tipe Spanish (dua biji/polong), ukuran polong dan biji sedang, kulit ari biji berwarna rose, dapat ditanam pada tipe iklim D atau tahan cekaman kekeringan pada fase generatif.

Keunggulannya potensi hasil mencapai 3,50 t/ha polong kering, toleran kekeringan, agak tahan penyakit bercak dan karat daun, jumlah polong banyak, dan ukuran biji besar.

Kehadiran varietas Hypoma 2 ini dapat sebagai alternatif petani dalam memilih benih unggul kacang tanah. Prospektif dikembangkan oleh industri benih tanaman pangan.

Hypoma 2 peanut has ripe age for about 90 days, Spanish type (two seeds / pods), medium pod and seed size, rose-colored seed epidermis, can be grown on climate type D or drought stress resistance in the generative phase.

The advantages are yield potential achieving 3.50 tons / ha of dry pods, drought tolerant, moderately resistant to rust and leaf spot diseases, numerous pods, and large seed size.

The presence of Hypoma 2 variety can be as an alternative to farmers in selecting superior seed peanuts. Prospectively developed by food crop seed industries.

46. Kacang Tanah Varietas Bison

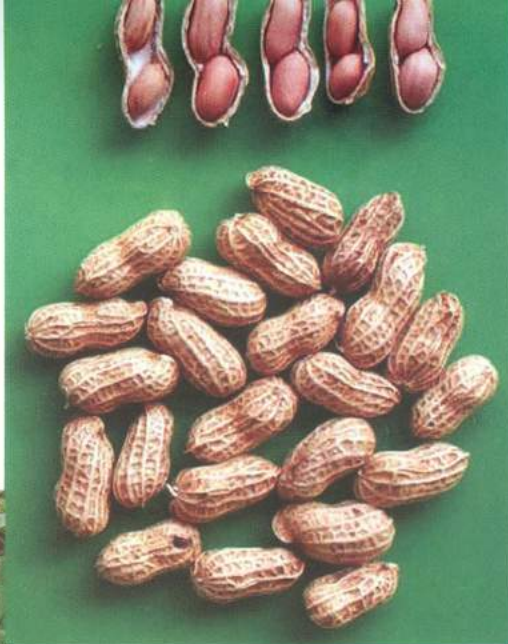
Bison Peanuts Variety



Kacang tanah varietas Bison merupakan persilangan tunggal antara varietas Kelinci dengan mutan varietas Gajah, tinggi tanaman mencapai 72 cm, jumlah polong 9 – 47 polong per tanaman, umur panen 90 hari, bobot 99 gram per 100 polong.

Keunggulannya potensi hasil tinggi 3,6 t/ha, kandungan protein 24 %, lemak 44,8 %, toleran naungan intensitas hingga 25 %, toleran Fe rendah dan adaptif pada tanah alkalis, agak tahan karat, bercak daun dan *A. flavus*.

Kehadiran varietas Bison ini dapat sebagai alternatif petani dalam memilih benih unggul kacang tanah. Prospektif dikembangkan oleh industri benih tanaman pangan.



Inventor : Astanto Kasno, Joko Purnomo, Novita Nugrahaeni, Trustinah, Mujiono, dan Paidi

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Status Perlindungan HKI : 22/PVHP/2010
IPR Protection Status : 22/PVHP/2010

Bison groundnuts variety is a single cross between Kelinci variety with Gajah variety mutant, crop height reaching 72 cm, number of pods 9-47 pods per crop, harvesting at 90 days old, weight is 99 grams per 100 pods.

The advantages are high yield potential of 3.6 tons / ha, 24% protein content, fat 44.8%, the intensity of shade tolerant up to 25%, low Fe tolerant and adaptive to the soil alkaline, moderately resistant of rust, leaf spot, and A. flavus.

The presence of Bison variety can be as an alternative to farmers in selecting superior seed groundnuts. Prospectively produced by food crop seed industries.



47. Kedelai Varietas Detam 1

Detam 1 Black Soybean Variety



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Varietas unggul Kedelai hitam Detam 1 merupakan hasil seleksi persilangan galur introduksi 9837 dengan Kawi yang dilepas pada tahun 2008. Detam 1 memiliki kandungan protein tinggi yaitu mencapai 35,4 %, potensi hasil 2,86 ton/ha. Umur panen Detam 1 selama 84 hari. Ukuran biji tergolong biji besar dengan bobot 100 gr biji adalah 14,8 gr.

Varietas kedelai ini potensial dikembangkan secara komersial oleh industri benih dan pangan sebagai bahan baku pembuatan kecap.

High yielding variety of Detam I black soybean is resulted from a crossbreeding between line introduction 9837 and Kawi selection released in 2008. Detam 1 has a high protein content, up to 35.4 % and potential yield 2.86 ton/ha. The harvesting age is 84 days. Size of the seed is relatively large with a weight of 100 g grains is 14.8 g.

It is potential to be developed commercially by seed industries as raw material of making soy sauce.



48. Kedelai Varietas DETAM-2

Detam-2 Black Soybean Variety



Inventor : M. Muchlis Adie, Gatut Wahyu AS, Suyamto, dan Arifin

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IPR Protection Status : 153/PVHP/2010

Varietas unggul kedelai hitam Detam 2 dilepas pada tahun 2008. Kedelai Detam 2 memiliki tinggi 57 cm, umur berbunga 34 hari dan umur panen 82 HST, bobot 13,5 g per 100 biji. Detam 2 merupakan hasil seleksi persilangan galur 9837 dengan Wilis.

Keunggulannya potensi hasil tinggi mencapai 2,96 t/ha, kandungan protein 45,6% dan lemak 14,8% berat kering, cocok untuk bahan baku kecap. Peka ulat grayak, agak tahan terhadap pengisap polong.

Varietas kedelai ini potensial dikembangkan secara komersial oleh industri benih tanaman pangan sebagai bahan baku pembuatan kecap.

High yielding black soybean variety of Detam 2 was released in 2008. Soybean Detam 2 has a 57 cm high, flowering age of 34 days and harvest age of 82 days after planting, weight reaching 13.5 g per 100 seeds. Detam 2 is the result of selection by crossing strain 9837 and Wilis.

The advantages are high yield potential reaching 2.96 tons / ha, the protein content of 45.6% and 14.8% fat of dry weight, suitable for soy sauce. Sensitive to grayak caterpillar, somewhat resistant to the pod sucking pest.

This variety is potentially developed commercially by crop seed industries as a raw material of making soy sauce.



Inventor : Muchlis Adie, Gatut Wahyu A.S,
Ayda Krismawati Suyanto

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Status Perlindungan HKI : -
IPR Protection Status : -

49. Kedelai Varietas GEMA *GEMA Soybean Variety*

Kedelai Gema berumur genjah, dapat dipanen umur 73 hari, cocok dikembangkan pada daerah bercurah hujan terbatas atau musim tanam ketiga, bobot biji 11.9 g/100 biji.

Keunggulannya umur genjah, produktivitas 2,47 t/ha; kandungan protein tinggi 39%, cocok untuk bahan baku tahu.

Varietas ini cocok untuk bahan baku tahu dan dapat dikembangkan pada curah hujan terbatas. Varietas ini prospektif dikembangkan oleh penangkar benih tanaman pangan.



Gema soybean is short-aged, it can be harvested at 73 days old, suitable to be developed on limited rainfall areas or third cropping season, grain weight is 11.9 g/100 seeds.

The advantages are short-aged, productivity of 2.47 t / ha, high protein content of 39%, suitable for raw materials of tofu.

This variety is suitable for raw materials of tofu and can be developed on the land with limited rainfall. This variety is prospectively developed by crops breeder.



50 Kedelai Varietas Tanggamus Tanggamus Soybean Variety

Inventor :

Darman M. Arsyad, M. Muchlis Adie,
Heru Kuswantoro, Purwantoro

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Status Perlindungan HKI :

Pendaftaran Varietas No. 122/PVHP/2009

IPR Protection Status:

Variety Registration No. 122/PVHP/2009



Kedelai varietas Tanggamus memiliki tinggi 67 cm, umur mulai berbunga 35 hari setelah tanam (HST), umur panen 88 HST, bobot per 100 biji adalah 11 gram, dan potensi hasil dapat mencapai 2,5 ton/ha. Ketahanan terhadap p nyakit karat daun moderat.

Keunggulan varietas ini memiliki potensi hasil tinggi. Polong tidak mudah pecah. Kandungan protein tinggi. Toleran terhadap kemasaman tanah yang tinggi. Varietas ini potensial dikembangkan pada lahan kering masam.

Potensial dikembangkan secara komersial oleh agroindustri pangan dalam penyediaan pangan yang berprotein tinggi untuk meningkatkan gizi masyarakat.

Characteristics of Tanggamus soybean variety are of 67 cm height, flowering age of 35 days after planting, harvesting age of 88 days after planting, weight of 100 grains is 11 grams, and the potential yield can reach 2.5 ton/ha. Moderately resistance to leaf rust disease moderately.

The advantages of this variety has high potential yield, the pods are resistance to be break, has high protein content, and tolerant to high soil acidity.

It is potential to be developed in acidic dry land and it is also potential to be developed commercially by food agro-industries for the provision of high protein food to improve the community nutrient.





51. Kedelai Varietas Seulawah *Seulawah Soybean Variety*



Kedelai varietas Seulawah memiliki tinggi ± 86 cm, umur mulai berbunga 39 HST, umur panen 93 HST, bobot per 100 biji adalah 9,5 gram, kandungan protein 45,9 %, kandungan lemak 12,1 % dan potensi hasil mencapai 2,53 ton/ha. Ketahanan terhadap penyakit karat daun moderat.

Keunggulan varietas ini memiliki potensi hasil tinggi. Polong tidak mudah pecah. Kandungan protein tinggi. Toleran terhadap kemasaman tanah yang tinggi.

Potensial dikembangkan pada lahan kering masam. Potensial dikembangkan secara komersial oleh agroindustri pangan dalam penyediaan pangan yang berprotein tinggi untuk meningkatkan gizi masyarakat.

Inventor :

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Sri Hardaningsih, E. Yusnawan

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Status Perlindungan HKI :

Pendaftaran Varietas No. 126/PVHP/2009

IPR Protection Status:

Variety Registration No. 126/PVHP/2009

Seulawah soybean variety has a height of ± 86 cm, with first flowering age of 39 days after planting, harvesting periode 93 days after planting, and weight of 100 grains 9.5 grams, 45.9 % protein content, 12.1 % lipid content, and potential yield can reach 2.53 ton/ha. Its has moderately resistance to leaf rust disease.

The advantages of the variety has high potential yield, the pods are resistance to be break, has high protein content, and tolerant to high soil acidity.

It is potential to be developed commercially by food agro-industries for the provision of high protein food to improve the community nutrient.

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