| | RTI REQUE | ST DETAILS | | | | | |
|---|---|---------------------------------------|----------------------|--|--|--|--|
| Registration No. : | IIOMR/R/T/23/00001 | 26/05/2023 | | | | | |
| Transferred From : | Department of Agricultural Research & Education on 26/05/2023 With Reference Number: ICARH/R/T/23/00154 | | | | | | |
| Remarks: | RTI is related to Millets. | | | | | | |
| Type of Receipt : | Electronically Transferred from Other Public Authority | rom Other Public Language of Request: | | | | | |
| Name: | Ishan Rajvanshi | Gender: | Male | | | | |
| Address: | Flat no. 302, Royal Tatvam Jaipur, Pin:302020 | Apartment, Krishna Sarovar, | Dholai, Mansarovar, | | | | |
| State : | Details not provided | Country: | India | | | | |
| Phone No. : | +91-9079191533 | | | | | | |
| Email: | ishanrajvanshi666@gmail.c | om | | | | | |
| Status(Rural/Urban): | Urban | Education Status : | Graduate | | | | |
| Letter No. : | Details not provided | Letter Date : | Details not provided | | | | |
| Is Requester Below Poverty Line ? : | No | Citizenship Status | Indian | | | | |
| Amount Paid : | 0 (Received by Department of Agricultural Research & Education) | Mode of Payment | Payment Gateway | | | | |
| Does it concern the life or Liberty of a Person ? | No(Normal) | Request Pertains to : | D Balakrishna | | | | |
| Information Sought : | Respected Central Public Information Officer, Please provide me with the below-requested information, as per the Right to Information Act 2005, section 6(I). As per the RTI Act Section 7(I) and Section 2(J)(II), kindly send this at the earliest within 30 days, through the certified copies at below-mentioned address or through electronic mail (ishanrajvanshi666@gmail.com). I kindly request the following information from the Department of Agriculture and Farmer Welfare: 1. List of Top Five Millets: Provide a comprehensive list of the top five millets grown in India, including their respective scientific names and common names in various local languages. 2. Production Statistics: Provide information on the production statistics of these top five millets for the most recent available year. 3. Geographical Distribution: Provide information on the geographical distribution of millet cultivation across different states and regions in India. 4. Nutritional Value: I kindly request information regarding the nutritional | | | | | | |

composition of these top five millets.

- 5. Research and Development Initiatives: Provide information on any ongoing or completed research and development initiatives, projects, or schemes related to millets supported by the Department of Agriculture and Farmer Welfare. Additionally, any efforts undertaken to promote millet cultivation, awareness, and market development would be of great interest.
- 6. Best Farming Practices: It would be valuable to receive information on recommended farming practices, techniques, and technologies for millet cultivation.
- 7. Appropriate Temperature Requirements: I request information on the appropriate temperature range required for the successful cultivation of various millet crops in India.
- 8. Appropriate Nutrient Requirements (NPK): Please provide details regarding the appropriate nutrient requirements, specifically Nitrogen (N), Phosphorus (P), and Potassium (K), for millet crops. This information should include the recommended quantities of these nutrients per hectare (kg/ha) and per acre (lbs/acre) for optimal growth and yield.
- 9. Appropriate Moisture Requirements: Provide information on the appropriate moisture requirements, including the water content or irrigation guidelines, for successful millet cultivation.
- 10. Appropriate Soil pH Requirements: Provide information on the appropriate soil pH range (acidic to basic) for different millet crops.

Respected Central Public Information Officer,

Please provide me with the below-requested information, as per the Right to Information Act 2005, section 6(I). As per the RTI Act Section 7(I) and Section 2(J)(II), kindly send this at the earliest within 30 days, through the certified copies at below-mentioned address or through electronic mail (ishanrajvanshi666@gmail.com).

I kindly request the following information from the Department of Agriculture and Farmer Welfare:

- 1. List of Top Five Millets: Provide a comprehensive list of the top five millets grown in India, including their respective scientific names and common names in various local languages.
- **Original RTI Text:**
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- 3. Geographical Distribution: Provide information on the geographical distribution of millet cultivation across different states and regions in India.
- 4. Nutritional Value: I kindly request information regarding the nutritional composition of these top five millets.
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| | RTI REQUE | ST DETAILS | | |
|---|---|-----------------------------|----------------------|--|
| Registration No. : | IIOMR/R/T/23/00002 | 26/05/2023 | | |
| Transferred From : | Department of Agricultural Research & Education on 26/05/2023 With Reference Number: ICARH/R/T/23/00153 | | | |
| Remarks: | RTI is related to Millet. | | | |
| Type of Receipt : | Electronically Transferred from Other Public Authority | English | | |
| Name: | Ishan Rajvanshi | Gender: | Male | |
| Address: | Flat no. 302, Royal Tatvam Jaipur, Pin:302020 | Apartment, Krishna Sarovar, | Dholai, Mansarovar, | |
| State: | Details not provided | Country: | India | |
| Phone No. : | +91-9079191533 | Mobile No. : | +91-9079191533 | |
| Email: | ishanrajvanshi666@gmail.c | om | | |
| Status(Rural/Urban): | Urban | Education Status : | Graduate | |
| Letter No. : | Details not provided | Letter Date : | Details not provided | |
| Is Requester Below Poverty Line ? : | No | Citizenship Status | Indian | |
| Amount Paid : | 0 (Received by Department of Agricultural Research & Education) | Mode of Payment | Payment Gateway | |
| Does it concern the life or Liberty of a Person ? | No(Normal) | Request Pertains to : | D Balakrishna | |
| Information Sought : | Respected Central Public Information Officer, Please provide me with the below-requested information, as per the Right to Information Act 2005, section 6(I). As per the RTI Act Section 7(I) and Section 2(J)(II), kindly send this at the earliest within 30 days, through the certified copies at below-mentioned address or through electronic mail (ishanrajvanshi666@gmail.com). I kindly request the following information from the Department of Agriculture and Farmer Welfare: 1. List of Top Five Millets: Provide a comprehensive list of the top five millets grown in India, including their respective scientific names and common names in various local languages. 2. Production Statistics: Provide information on the production statistics of these top five millets for the most recent available year. 3. Geographical Distribution: Provide information on the geographical distribution of millet cultivation across different states and regions in India. 4. Nutritional Value: I kindly request information regarding the nutritional | | | |

composition of these top five millets.

- 5. Research and Development Initiatives: Provide information on any ongoing or completed research and development initiatives, projects, or schemes related to millets supported by the Department of Agriculture and Farmer Welfare. Additionally, any efforts undertaken to promote millet cultivation, awareness, and market development would be of great interest.
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ICAR-Indian Institute of Millets Research (IIMR) Rajendranagar, Hyderabad 500030

Query 1: List of Top Five Millets: Provide a comprehensive list of the top five millets grown in India, including their respective scientific names and common names in various local languages

Reply: As per the classification of millets in the category of "Coarse Cereals" by the Ministry of Agriculture & Farmers Welfare, wherein the area, production and yield data of millet crops are provided, there are four categories under which data is presented. They are "Jowar, Bajra, Ragi and Small Millets. There is no such classification such as "top millets" or "top five millets". The Small millets category consists of combined data of foxtail millet, barnyard millet, kodo millet, little millet and proso millet. The details of scientific names and common names in regions where they are grown is as below.

| Scientific name | English name | Common names | | |
|---------------------|---|--------------------------------|--|--|
| Sorghum bicolor | Sorghum, Great millet | Bengali: Jowar | | |
| | 3 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - | Gujarati: Jowari, Juar | | |
| | | Hindi: Jowari, Juar | | |
| | | Kannada: Jola | | |
| | | Marathi: Jowari, Jondhala | | |
| | | Oriya: Juara | | |
| | | Punjabi: Jowar | | |
| | | Tamil: Cholam | | |
| | | Telugu: Jonna | | |
| Pennisetum glaucum | Pearl millet, Millet | Bengali: Bajra | | |
| 1 chinselum giaucum | real minet, white | Gujarati: Bajri | | |
| | | Hindi: Bajra | | |
| | | Kannada: Sajje | | |
| | | Marathi: Bajri | | |
| | | | | |
| | | Oriya: Bajra | | |
| | | Punjabi: Bajra | | |
| | | Tamil: Kambu | | |
| | Try the | Telugu: Sajja | | |
| Eleusine coracana | Finger millet | Bengali: Marwa | | |
| | | Gujarati: Nagli, Bavto | | |
| | | Hindi: Ragi, Mandika, Marwah | | |
| | | Kannada: Ragi | | |
| | | Marathi: Nagli, Nachni | | |
| | | Oriya: Mandia | | |
| | | Punjabi: Mandhuka, Mandhal | | |
| | | Tamil: Keppai, Ragi, Kelvaragu | | |
| | | Telugu: Ragi Chodi | | |
| Setaria italica | Foxtail millet | Assamese: Konidhan | | |
| | | Bengali: Kaon | | |
| | | Gujarati: Kang | | |
| | | Hindi: Kakum | | |
| | | Kannada: Navane | | |
| | | Marathi: Kang, Rala | | |
| | | Oriya: Kanghu, Kangam, Kora | | |
| | | Punjabi: Kangni | | |
| | | Tamil: Tenai | | |
| | | Telugu: Korra | | |
| Panicum milliaceum | Proso millet | Bengali: Cheena | | |
| 1 4 | | Gujarati: Cheno | | |
| | | Hindi: Chena; Barri | | |
| | [4 | Kannada: Baragu | | |

| | | Marathi: Vari Oriya: China Bachari bagmu Punjabi: Cheena Tamil: Pani varagu Telugu: Variga |
|------------------------|-----------------|--|
| Panicum sumatrense | Little millet | Bengali: Sama Gujarati: Gajro; Kuri Hindi: Kutki, Shavan Kannada: Same, Saave Marathi: Sava, Halvi, vari Oriya Suan Punjabi: Swank Tamil: Samai Telugu: Samalu |
| Paspalum scrobiculatum | Kodo millet | Bengali: Kodo Gujarati: Kodra Hindi: Kodon Kannada: Harka Marathi: Kodra Oriya: Kodua Punjabi: Kodra Tamil: Varagu Telugu: Arikelu, Arika |
| Echinochola crus-galli | Barnyard millet | Bengali: Shyama Gujarati: Banti Hindi: Sanwa Kannada: Oodalu Oriya: Khira Punjabi: Swank Tamil: Kuthiraivolly Telugu: Udalu, Kodisama |

Query 2: Production Statistics: Provide information on the production statistics of these top five millets for the most recent available year

Reply: The state-wise data on production of millets, among other crops are routinely published by Directorate of Economics and Statistics, Department of Agriculture and Farmer Welfare and is available at their website: https://eands.dacnet.nic.in/. The latest production data available (https://eands.dacnet.nic.in/PDF/5-Year%20Foodgrain%202016-17%20to%202020-21.xlsx) with regard to millets production statistics during 2020-21 is furnished below.

| Millet Crop | Production (000 tonnes) during 2020-21 in India 4812.07 | | |
|----------------------|---|--|--|
| Jowar (Sorghum) | | | |
| Bajra (Pearl millet) | 10863.17 | | |
| Ragi (Finger millet) | 1998.36 | | |
| Small millets | 346.95 | | |

Query 3: Geographical Distribution: Provide information on the geographical distribution of millet cultivation across different states and regions in India

Reply: The states in which the millets are grown can also be understood from the data available in the web site of Directorate of Economics and Statistics, Department of Agriculture and Farmer Welfare and is available at their website: https://eands.dacnet.nic.in/

The same is presented below as requested by the applicant.

Jowar growing states in 2020-21: Andhra Pradesh, Bihar, Chhattisgarh, Gujarat, Haryana, Himachal Pradesh, Jharkhand, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Nagaland, Odisha, Rajasthan, Tamil Nadu, Telangana, Tripura, Uttar Pradesh, West Bengal and Delhi

Bajra growing states in 2020-21: Andhra Pradesh, Bihar, Chhattisgarh, Gujarat, Haryana, Himachal Pradesh, Jammu & Kashmir, Jharkhand, Karnataka, Madhya Pradesh, Maharashtra, Nagaland, Odisha, Punjab, Rajasthan, Tamil Nadu, Telangana, Uttar Pradesh, West Bengal, Puducherry, Delhi and Daman & Diu

Ragi growing states during 2020-21: Andhra Pradesh, Bihar, Chhattisgarh, Gujarat, Himachal Pradesh, Jharkhand, Karnataka, Kerala, Maharashtra, Nagaland, Odisha, Tamil Nadu, Telangana, Uttarakhand, West Bengal, D & N Haveli and Puducherry

Small millets growing states during 2020-21: Andhra Pradesh, Arunachal Pradesh, Assam, Bihar, Chhattisgarh, Gujarat, Himachal Pradesh, Jammu & Kashmir, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Meghalaya, Nagaland, Odisha, Rajasthan, Sikkim, Tamil Nadu, Tripura, Uttar Pradesh, Uttarakhand, West Bengal and Puducherry

Query 4: Nutritional Value: I kindly request information regarding the nutritional composition of these top five millets.

Reply: Nutritional profile of millet grains (per 100g grains)

| Millets | Moisture (g) | Protein (g) | Ash (g) | Total Fat (g) | Dietary Fiber (g) | Carbo hydrate (g) | Energy (K. Cal) |
|-----------------|-----------------|-------------|------------|------------------|----------------------|----------------------|--------------------|
| Pearl millet | 08.97 | 10.96 | 1.37 | 5.43 | 11.49 | 61.78 | 340 |
| Sorghum | 09.01 | 09.97 | 1.39 | 1.73 | 10.22 | 67.68 | 326 |
| Finger millet | 10.89 | 07.16 | 2.04 | 1.92 | 11.18 | 66.82 | 313 |
| Little Millet | 11.36 | 10.13 | 1.34 | 3.89 | 07.72 | 65.55 | 338 |
| Kodo Millet | 14.23 | 08.92 | 1.72 | 2.55 | 06.39 | 66.19 | 329 |
| Foxtail Millet | 11.20 | 12.30 | 3.30 | 4.30 | 06.70 | 60.90 | 331 |
| Barnyard Millet | 11.90 | 06.20 | 4.40 | 2.20 | 13.60 | 65.50 | 307 |
| Proso Millet | 11.90 | 12.50 | 1.90 | 1.10 | 09.60 | 70.40 | 341 |

Query 5: Research and Development Initiatives: Provide information on any ongoing or completed research and development initiatives, projects, or schemes related to millets supported by the Department of Agriculture and Farmer Welfare. Additionally, any efforts undertaken to promote millet cultivation, awareness, and market development would be of great interest.

Reply: Department of Agriculture and Farmer Welfare (DAFW) does not undertake research in agriculture. Its sister department- Department of Agriculture Research and Education (DARE) has established a research institute to carry out research with regard to agriculture of millets has been established by the under the Indian Council of Agricultural Research society at Hyderabad called Indian Institute of Millets Research (ICAR-IIMR). The efforts of DAFW to promote millets are available in their specific websites https://agricoop.nic.in/en/FarmWelfare and https://www.nutricereals.dac.gov.in/. The

Research programmes, Annual reports and Publications of IIMR are available in the website https://www.millets.res.in/

Query 6: Best Farming Practices: It would be valuable to receive information on recommended farming practices, techniques, and technologies for millet cultivation

Reply: The information is available in the IIMR web site under "For Farmers" and "Publications". Specifically, you can refer to the following e-books, as you are desirous of availing information in digital format.

- 1. Latest Millet Production and Processing Technologies https://www.millets.res.in/farmer/Latest_Millet_English_Full_Book_2020.pdf
- 2. Manual on good agricultural practices in millets https://www.millets.res.in/pub/2019/GAP manual.pdf

Query 7: Appropriate Temperature Requirements: I request information on the appropriate temperature range required for the successful cultivation of various millet crops in India

Reply: Details are available in the publications mentioned in the point no. 6 (on Best Farming Practices) above.

Query 8: Appropriate Nutrient Requirements (NPK): Please provide details regarding the appropriate nutrient requirements, specifically Nitrogen (N), Phosphorus (P), and Potassium (K), for millet crops. This information should include the recommended quantities of these nutrients per hectare (kg/ha) and per acre (lbs/acre) for optimal growth and yield.

Reply: Details are available in the publications mentioned in the point no. 6 (on Best Farming Practices) above

Query 9: Appropriate Moisture Requirements: Provide information on the appropriate moisture requirements, including the water content or irrigation guidelines, for successful millet cultivation

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Query 10: Appropriate Soil pH Requirements: Provide information on the appropriate soil pH range (acidic to basic) for different millet crops

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(Dr. D. Balakrishna)

Principal Scientist,

ICAR-Indian Institute of Millets Research