



DR. Ashish R Warghat

Scientist

CSIR-Institute of Himalayan Bioresource Technology,
Palampur (H.P.)-176061

Mobile No: +91 9463378921, 9816146345

Skype Name: Ashish.warghat

E mail: ashishwarghat@ihbt.res.in, ashishwarghat@hotmail.com

Career Objective:

- To achieve the responsible and deserving post in an organization where i can fulfill my duties as well as develop myself in the competitive environment.
- To work for Diversity, conservation and sustainable utilization of rare and endangered plants with the help of biotechnological approaches.

Current Status:

- Working as a Scientist 'C' Since 10th Dec. 2015 in CSIR-Institute of Himalayan Bioresource Technology, Palampur, Himachal Pradesh, India

Working experience: (6 year and 09 months)

- Two year research experience as Junior Research Fellow at Defence Institute of High Altitude Research (DIHAR), Defence Research and Development Organization (DRDO), Ministry of Defence, Leh (J&K), India, from 11th Feb. 2009 to 12th Feb. 2011.
- Two year and ten month research experience as Senior Research Fellow at Defence Institute of High Altitude Research (DIHAR), Defence Research and Development Organization (DRDO), Ministry of Defence, Leh (J&K), India, from 12th Feb. 2011 to 31st Dec. 2013.
- One year and eleven month research experience as Research Associate at Defence Institute of High Altitude Research (DIHAR), Defence Research and Development Organization (DRDO), Ministry of Defence, Chandigarh India,

Research Interest:

Plant cell and Tissue culture, Molecular markers, Gene profiling, Plant vegetation, Ecological niche modelling and other related approaches in the field of biotechnology

Academic Profile:

Ph.D. awarded (Biotechnology) from Jaypee University of Information Technology Wanknaghat, Solan, Himachal Pradesh, India. **Year-2015**

M.Sc. Botany (Specialization in Molecular Biology and Plant Biotechnology) from R.T.M. Nagpur University, Nagpur, Maharashtra, India. **Year-2008**

B.Sc. in Chemistry, Botany and Zoology from R.T.M. Nagpur University, Nagpur, Maharashtra, India, **Year-2006**

Higher Secondary School Examination (12th) from Nagpur Board, Nagpur, Maharashtra, India **Year- 2003.**

Secondary School Examination (10th) from Nagpur Board, Nagpur, Maharashtra, India. **Year- 2001.**

Publications:

Research Papers Published /Accepted / Under review/Communicated/Under preparation: **(Citation= 66)**

- Sunil Akare, **Ashish R. Warghat**, Walay Tagade and Rajesh Thakare, “Culturable fungal diversity associated with forest leaf litter from Bhandara District of Maharashtra, India” *Biodiversitas*, volume 17, number 1,349-358, 2016
- **Ashish R. Warghat**, Prabodh Kumar Bajpai, Stanzin rewang, Sahil Kapoor, Jitendra kumar, O.P. Chaurasia and R.B. Srivastava, “In Vitro callus induction and mass propagation of *Saussurea lappa* (L.) by using different hormone concentration in cold desert Ladakh region of India.” *Proceedings of the National Academy of Sciences, India Section B: Biological Sciences*, 86, Issue 3, 651-660, 2016.
- Prabodh K. Bajpai, **Ashish R. Warghat**, Ashish Yadav, Anil K. Thakur, Ravi B. Srivastava and Tsering Stobdan, “High phenotypic plasticity in *Morus alba* L. along low altitudinal gradient in Indian trans-Himalaya.” *Journal of Mountain Science*,12(2),446-455, 2015.
- Prabodh K. Bajpai, **Ashish R. Warghat**, Anil Kant, Ravi B. Srivastava and Tsering Stobdan, “Detecting molecular signatures of natural selection in *Morus alba* L. populations from trans-Himalaya.” *Journal of Systematics and Evolution*, Vol. 52, Issue 5, pp. 589-597, 2014.
- Prabodh K. Bajpai, **Ashish R. Warghat**, Priyanka Dhar, Anil Kant, Ravi B. Srivastava and Tsering Stobdan, “Variability and fruit color effect on antioxidant activity, phenolics, flavonoids, anthocyanin and proanthocyanidin content in *Morus alba* L. fruit from the trans-Himalaya, India.” *LWT-Food Science and Technology*, Vol. 59, pp. 981-988, 2014.
- **Ashish R. Warghat**, Prabodh K. Bajpai, Ravi B. Srivastava, Om P. Chaurasia, Rajinder S. Chauhan and Hemant Sood, “In vitro protocorm development and mass multiplication of an endangered orchid *D. hatagirea*.” *Turkish Journal of Botany*, Vol. 38, pp. 737-746, 2014.
- Prabodh K. Bajpai, **Ashish R. Warghat**, Ram Kumar Sharma, Ashish Yadav, Anil K. Thakur, Ravi B. Srivastava and Tsering Stobdan, “Structure and Genetic Diversity of Natural Populations of *Morus alba* in the Trans-Himalayan Ladakh Region.” *Biochemical genetics*, Vol. 52, pp. 137-152, 2014.
- **Ashish R. Warghat**, Prabodh K. Bajpai, Ravi B. Srivastava, Hemant Sood and Om P. Chaurasia, “Genetic structure and conservation of small fragmented locations of *Dactylorhiza hatagirea* in Ladakh region of India.” *Scientia Horticulturae*, Vol. 164, pp. 448-454, 2013.
- Janifer Raj X, Basant Ballabh, M Pal Murugan, Priyanka Dhar, Amol B. Tayade, **Ashish R. Warghat**, O.P. Chaurasia and R. B. Srivastava, “Effect of auxins on adventitious

rooting from hardwood cuttings of *Hippophae rhamnoides* under Ladakh Himalayas.” **Indian Forester**, Vol 139, issue 3, pp. 228-231, 2013.

- **Ashish R. Warghat**, Prabodh K. Bajpai, Hemant Sood, Om P. Chaurasia and Ravi B. Srivastava, “Morphometric analysis of *Dactylorhiza hatagirea* (D.don) a critically endangered orchid in cold desert Ladakh region of India.” **African journal of Biotechnology**, Vol. 11(56), pp. 11943-11951, 2012.
- Vinod R. Maraskolhe, **Ashish R. Warghat**, Guru Charan, P.B. Nandkar, “Carbon Sequestration Potential of *Scenedesmus species* (Microalgae) under the fresh water ecosystem.” **African Journal of Agricultural Research**, Vol. 7(18), pp. 2818-2823, 2012.
- **Ashish R. Warghat**, Prabodh K. Bajpai, Ashutosh A. Murkute, Hemant Sood, Om P. Chaurasia and Ravi B. Srivastava, “Genetic diversity and population structure of *Dactylorhiza hatagirea* (Orchidaceae) in cold desert Ladakh region of India.” **Journal of Medicinal Plants Research**, Vol. 6(12), pp. 2388-2395, 2012.
- Sunil Gupta, Manish S. Bhoyar, Jitendra Kumar, **Ashish R. Warghat**, Prabodh Kumar Bajpai, Muzamil Rasool, Gyan P Mishra, Pradeep K. Naik and Ravi. B. Srivastava, “Genetic diversity among natural populations of *Rhodiola imbricata* Edgew. from trans-Himalayan cold arid desert using random amplified polymorphic DNA (RAPD) and inter simple sequence repeat (ISSR) markers.” **Journal of Medicinal Plants Research**, Vol. 6(3), pp. 405-415, 23 January 2012.
- Guru Charan, **Ashish R. Warghat** and A.B. Abidi, “Nutritional composition of rice (*Oryza saliva* L.) varieties growing in Northern India under the ambient environmental conditions.” **Journal of Progressive Agriculture**, Vol. 3, issue 2, pp.63-67, 2012.
- Chetna V. Ugale, **Ashish R. Warghat**, Priti V. Phate and Prashant Wagh, “Callus induction studies in *psophocarpus tetragonolobus* (l.) (Family: leguminosae).” **International Journal of pharmaceutical science review and research**, Vol. 11, Issue 2, 30-32, 2011.
- **Ashish R. Warghat**, Nandkishor H. Rampure and Prashant Wagh, “Effects of sodium azide and gamma rays treatments on percentage germination, survival, morphological variation and chlorophyll mutation in musk okra (*Abelmoschus moschatus* l.).” **International Journal of pharmacy and pharmaceutical science**, Vol 3, Suppl 5, 483-486, 2011.
- **Ashish R. Warghat**, Nandkishor H. Rampure and Prashant Wagh, “In vitro callus induction in *Abelmoschus moschatus* medic L. by using different hormone concentration.” **International Journal of pharmaceutical science review and research**, Vol. 10, Issue 2, 82-84, 2011.
- **Ashish R. Warghat**, Prabodh K. Bajpai, Ravi B. Srivastava, Hemant Sood and Om P. Chaurasia, “Analysis of associated vegetation and Climatic Characteristics of the endangered terrestrial orchid, *Dactylorhiza hatagirea* (D. Don) in the Ladakh Region of India.” **Phyton-International Journal of Experimental Botany (Accepted)**.
- **Ashish R. Warghat**, Prabodh K. Bajpai, Ravi B. Srivastava, Hemant Sood and Om P. Chaurasia, “Multivariate analysis of the effects of soil parameters and environmental factors on the vegetation status of *D. hatagirea*.” **Journal of Vegetation Science (Accepted)**.
- **Ashish R. Warghat**, Prabodh K. Bajpai, Ravi B. Srivastava, Hemant Sood and Om P. Chaurasia “Habitat distribution modelling for reintroduction of *Dactylorhiza hatagirea* (D.Don), a critically endangered orchid of Trans-Himalayan Ladakh region of India.” **Ecological Engineering (Accepted)**.
- **Ashish R. Warghat**, Prabodh K. Bajpai, Ravi B. Srivastava, Hemant Sood and Om P. Chaurasia “Habitat distribution modelling for reintroduction of *Dactylorhiza hatagirea* (D.Don), a critically endangered orchid of Trans-Himalayan Ladakh region of India.” **Ecological Engineering (Accepted)**.

- **Ashish R. Warghat**, Prabodh K. Bajpai, Ravi B. Srivastava, Hemant Sood and Om P. Chaurasia, “The influence of Natural barriers in shaping the genetic structure of *Dactylorhiza hatagirea* populations.” *Journal of Nature Conservation (Under review)*.
- **Ashish R. Warghat**, Prabodh K. Bajpai, Ravi B. Srivastava, Hemant Sood and Om P. Chaurasia, “Antioxidant Capacities, Phenolic Contents and ESI-MS Analysis of *D. hatagirea* plant part Extracts from Trans-Himalayan Ladakh region of India.” *Journal of Food Science (Under review)*.
- **Ashish R. Warghat**, Stanzin Rewang, Prabodh Kumar Bajpai, Jitendra Kumar, Jennifer Raj X, Om P. Chaurasia and Ravi B. Srivastava, “Comparative study on seed germination of endangered medicinal plants of Ladakh region of India.” *Propagation of ornamental plants- an international journal (Under review)*.

Book Chapter:

- Ashutosh A. Murkute, **Ashish R. Warghat**, G. Phani Kumar, G.P. Mishra and Sunil E. Jadhav, “*Dactylorhiza hatagirea* (D. Don) a Critically endangered medicinal plant of Trans-Himalaya.” pp.37-46, *Herbal perspectives: present and Future*, ISBN 81-89304-91-7, **2011**.
- Janifer Raj X, Jitendra Kumar, Manish Bhoyar, Prabodh Kumar Bajpai, **Ashish Warghat** and R. B. Srivastava, “Biotechnological approaches for molecular characterization and Conservation of Trans-Himalayan flora.” pp. 171-184, *High Altitude cold Arid Agro animal Technology*, ISBN 978-93-81226-02-5, **2012**.

Monograph:

Ashish Warghat, Nandkishor Rampure and Prashant Wagh, “Tissue culture of *Abelmoschus moschatus*, a medicinal herb.” pp. 1-53, **Lambert publishing house, Germany** ISBN 978-3-659-11597-4, **2012**.

Bulletin:

Janifer Raj X, Jitendra Kumar, Prabodh Kumar Bajpai, **Ashish Warghat**, Narendra Singh and R. B. Srivastava, “Biotechnology- A tool to characterize and conserve Ladakh flora.” Extension Bulletin No. 21, Defence Institute of High Altitude Research, DRDO, Leh, Ladakh, Jammu & Kashmir, India, **2012**.

Paper presented in Conference/ Symposia/Workshop/Seminar:

- **Ashish R. Warghat**, Prabodh Kumar Bajpai, Ashutosh A. Murkute, Hemant Sood and R. B. Srivastava, “Morphometric and Genetic divergence among populations of *Dactylorhiza hatagirea* (Orchidaceae), an endangered terrestrial orchid in Trans-Himalayan regions of India.” 20th world orchid conference, Sands Expo and Convention Centre, Singapore. 13th-20th November, 2011 **(Poster)**.
- **Ashish R. Warghat**, Stanzin Rewang, Prabodh Kumar Bajpai, Jitendra Kumar, Jennifer Raj X, O.P. Chaurasia and R.B. Srivastava, “*In Vitro* callus induction of *Saussurea lappa* (L.) by using different hormone concentration in cold desert of Ladakh region.” International conference on Emerging trends on Food and Health Security in Cold deserts held at Defence Institute of High Altitude Research (DIHAR), Leh, Ladakh, Jammu & Kashmir. 23rd-25th September, 2011**(Poster)**.
- Prabodh K Bajpai, **Ashish R. Warghat**, Anil Kant Thakur, Ashish Yadav, Gyan P Mishra and R. B. Srivastava, “ Conservation genetics of *Morus alba* in Ladakh.” International conference on “Emerging trends on Food and Health Security in Cold deserts held at Defence Institute of High Altitude Research (DIHAR), Leh, Ladakh, Jammu & Kashmir. 23rd-25th September, 2011 **(Poster)**.
- **Ashish R. Warghat**, Prabodh K. Bajpai, Ashutosh A. Murkute, Hemant Sood and R. B. Srivastava, “Morphological and Molecular differentiation among populations of *Dactylorhiza hatagirea* (Orchidaceae), a critically endangered orchid in Trans-Himalaya.” 15th ADNAT Convention, a three day International Symposium on “Genomics and Biodiversity held CCMB, Hyderabad. 23rd - 25th February, 2011 **(Oral)**.
- Prabodh K. Bajpai, **Ashish R. Warghat**, Ashutosh A. Murkute, Ashish Yadav, Anil Kant Thakur and R.B Srivastava, “Genetic diversity of Mulberry (*Morus sp.*) from cold arid high altitude region.” 15th ADNAT Convention, a three day International Symposium on Genomics and Biodiversity held CCMB, Hyderabad. 23rd - 25th February, 2011 **(Poster)**.
- **Ashish R. Warghat**, Prabodh K. Bajpai, Hemant Sood, A.A. Murkute and S.B. Singh, “Exploring genetic diversity in *Dactylorhiza hatagirea* (D.Don) a Critically endangered orchid in Trans-Himalayan region.” 4th Indian Horticulture Congress, held at Indian Agriculture Research Institute (IARI), New Delhi. 18th-21st November, 2010 **(Poster)**.
- Prabodh K. Bajpai, **Ashish R. Warghat**, Ashutosh A. Murkute, Ashish Yadav, Anil Kant Thakur and R.B Srivastava, “Genetic diversity in Mulberry (*Morus sp.*) from Ladakh using ISSR markers.” 4th Indian Horticulture Congress, held at Indian Agriculture Research Institute (IARI), New Delhi. 18th -21st November, 2010 **(Poster)**.
- **Ashish R. Warghat**, A. A. Murkute, Gyan P Mishra, G Phani Kumar and Shashi Bala Singh, “ Exploring morphological diversity in *Dactylorhiza hatagirea* (D.Don) in the cold arid desert of Ladakh.” National conference on Seabuckthorn and Environment: High Altitude Perspectives, held at Defence Institute of High Altitude Research (DIHAR), Leh, Ladakh, Jammu & Kashmir. 25-27 September, 2009 **(Poster)**.
- **Ashish R. Warghat**, “Conservation and commercial utilization of incredible medicinal plants by plant tissue culture techniques in High altitude.” National science day Rajbhasha seminar at Defence Institute of High Altitude Research (DIHAR), Leh, Ladakh, Jammu & Kashmir. 28 February, 2009 **(Information)**.
- Nandkishor H. Rampure, **Ashish R. Warghat** and Prashant Wagh, “In vitro callus induction in *Abelmoschus moschatus* (L.) Medik using different hormone concentration.” National conference on Biodiversity, Conservation & sustainable development, held at P.G.T.D. Botany, R.T.M. Nagpur University, Nagpur. 7th-9th January, 2008 **(Poster)**.

Reviewer of Journals:

1. Nordic Journal of Botany
2. Proceedings of the National Academy of Sciences, India Section B:
Biological Sciences
3. Global Journals Inc. (US)- Honorary Peer Reviewer
4. International Journal of Plant physiology and Biochemistry, Nigeria

