#### **PROGRAMME**

## 7<sup>th</sup> Conference of International Association of Seabuckthorn (ISA-2105)

November 24-26, 2015, New Delhi, India

Conference venue: A.P. Shinde Auditorium, NASC Complex, near PUSA, New Delhi 110012, India

#### **Registration of delegates:**

23.11.2015, Monday: 3.00-7. 00 PM: A.P. Shinde auditorium, NASC Complex & Hotels

24.11.2015, Tuesday: 8:00-9:15 AM: A.P. Shinde auditorium, NASC Complex

#### **Programme at a glance**

Day	Event	Venue	Time
24/11/2015	Inaugural session	A.P. Shinde auditorium	09.15-10.40AM
(Tuesday)	Lead Lecture of Prof. H. Kallio	A.P. Shinde auditorium	11.05-11.35 AM
	Technical session I	Committee room	11.40 AM-01.15 PM
	Combating climate change,		
	conservation of environment and		
	rural development		
	Technical session IIa	A.P. Shinde auditorium	11.40 AM-01.15 PM
	Cultivation technologies- Part I		
	Technical session IIb	A.P. Shinde auditorium	02.00-05.00 PM
	Cultivation technologies- Part II		
	Technical session III	Committee room	02.00-05.00 PM
	Genetic diversity & breeding		
25/11/2015	Technical session IV	Committee room	09.30 AM-01.15 PM
(Wednesday)	Phytochemistry		
	Technical session V	A.P. Shinde	09.30 AM-01.15 PM
	Medical research	Auditorium	
	Technical session VI	Committee room	02.00-05.00 PM
	Processing technologies/ product		
	development & trade		
	Technical session VII	A.P. Shinde auditorium	02.00-05.00 PM
	Biomedical Research	G	( 00 0 00 DD 7
	Meeting of Board of Directors of	Committee room	6.00-8.30 PM
26/11/2015	ISA TO A CONTROL OF THE PARTY O	A D Cl. 1 14	00.20 ANT 01.00 PRT
26/11/2015	Technical session VIII	A.P. Shinde auditorium	09.30 AM-01.00 PM
(Thursday)	Policy issues on Seabuckthorn	A D Cl. 1 14	01 00 01 20 DM
	Closing session	A.P. Shinde auditorium	01.00-01.30 PM
26/11/2015	Visit to Kingdom of Dreams,	From Venue of A.P.	3.30-10.00 PM
(Thursday)	Gurgaon	Shinde auditorium	
27/11/2015-	Excursion tour to Jaipur-Agra or	Sidarth Hotel &	
29/11/2015	Leh & back on 30.11.15 at 5 PM	NASC Complex	
	& then to Airport		

## The detailed programme

## Tuesday, November 24, 2015

#### **Inaugural session:**

**Venue:** A.P. Shinde auditorium, NASC Complex **Time:** 09.15-11.40 AM

09.15-10.40 AM	Formal opening of conference
10.40-11.00 AM	Tea break
11.05 -11.35 AM	Lead lecture: H. Kallio
	Chairpersons: Brahma Singh and Tej Pratap

# Technical session I: Combating climate change, conservation of environment and rural development

**Venue:** Committee room, NASC Complex **Time:** 11.40 AM-01.15 PM

**Chairpersons:** K.K. Katoch and Wilhelm Kruse **Rapporteur:** T. Stobdan

11.40 AM-12.00 Noon	Key note address: An Baoli
	The ecological practice in the Pisha sandstone areas by planting
	seabuckthorn
12.00 Noon onwards	
Wilhelm Kruse	Seabuckthorn (SBT)-An alternative plant for high mountain
	agri-business and livelihood improvement in Central Asian
	countries-Actual situation and future prospects
R.K. Maikhuri	Seabuckthorn: An underutilized resource for the nutritional
	security and livelihood improvement of higher Himalaya rural
	communities in Uttarakhand
Ghulam Nabi Shigri	Seabuckthorn becoming a major contributor to combat the
	climate improvement and & women empowerment in Gilgit
	Baltistan
Yang Fang-She	Ecological restoration and soil improvement performance of
	the seabuckthorn flexible dam in the Pisha Sandstone area of
	Northwestern China
Abdul Wahid Jasra	Seabuckthorn-an ecosystem based adaptation strategy for
	arid mountain areas
1.10 PM	Chairman's remarks
1.15 PM	Lunch at dining hall, NASC Complex

## **Technical Session IIa: Cultivation technologies- Part I**

Venue: A.P. Shinde auditorium, NASC complexTime: 11.40 AM-01.15 PMChairperson: Bi Yang and D. K. VatsaRapporteur: Venu Kaul

11.40 AM-12.00 Noon	Key note address: Bhuvnesh Kumar
	Research progress on seabuckthorn at defence institute of high
	altitude research
12.00 Noon onwards	
D. K. Vatsa	Status and scope of seabuckthorn fruit harvesting in Indian Himalayas
Longsheng Fu	Simulation of vibration harvesting mechanism for seabuckthorn
B S Mankotia	Studies on spatial requirement and weed management in establishing seabuckthorn (Hippophae rhamnoides ssp. turkestanica L.) plantations in Lahaul valley in Himachal Pradesh, India
J.P.Saini	Impact of N & P doses on the yield of improved forages grown alongwith Seabuckthorn ( <i>Hippophae rhamnoides</i> ) in dry temperate zones of Lahaul-Spiti, Himachal Himalayas
Bi Yang	Problems and strategies on harvesting of Seabuckthorn berries in China
1.10 PM	Chairman's remarks
1.15 PM	Lunch at dining hall, NASC Complex

#### **Technical Session IIb:** Cultivation technologies- Part II

**Venue:** A.P. Shinde auditorium, NASC complex **Time:** 02.00-05.00 PM

Chairpersons: Lu Rongsen and S.K. Dwevedi Rapporteur: Venu Kaul

02.00-2.20 PM	Key note address: Virendra Singh
	A model on "A value chain on seabuckthorn" for upscaling by developmental agencies in Himalayas
02.20 PM onwards	
Amjad Ali	Pollination biology in <i>Hippophae rhamnoides</i> L. growing in cold desert of Ladakh
B.C. Basistha	Frankia nodulation study of <i>Hippophae salicifolia</i> in riverine and non-riverine areas of Lachen valley in North Sikkim
Sanjai K. Dwivedi	Propagating seabuckthorn ( <i>Hippophae rhamnoides</i> L.) through soft-wood cuttings
Stanisław Pluta	The possibility of seabuckthorn cultivation in Poland
R. K. Rana	Seabuckthorn (Hippophae salicifolia D. Don.): As a horticulture crop for cold desert area of Lahaul and Spiti district in Himachal Pradesh, India
03.30-03.50 PM	Tea break
L.K. Sharma	Experiences on Mass multiplication and systematic plantation

	of seabuckthorn in cold desert condition of Himachal Pradesh	
Abhay Sharma	Role of Seabuckthorn in improvement of soil fertility in cold	
_	desert of Himalayas	
Tsering Stobdan	Propagation and primary processing of seabuckthorn in Trans-	
	Himalayan Ladakh, India	
Pardeep Kumar	Management of Seabuckthorn (Hippophae spp.) diseases with	
	organics in Lahaul valley-A dry temperate zone of Himachal	
	Pradesh	
V. P. Khanduri	Selection and propagation of Hippophae salicifolia in	
	Uttarakhand Himalaya	
S.S. Samant	Ecological Niche Modeling and identification of suitable areas	
	for Hippophae species in Himachal Pradesh: Implications for	
	conservation	
05.00 PM	Chairman's remarks	
07.00-08.30 PM	Cultural programme at A.P. Shinde Auditorium, NASC Complex	
08.30 PM	Dinner at dining hall, NASC complex	

# **Technical Session III:** Genetic diversity & breeding

**Venue:** Committee room, NASC complex **Chairpersons:** S.N. Raina and G.S. Randhawa **Rapporteur:** Netrapal Sharma

02.00-2.20 PM	Key note address: P.C. Sharma
	Seabuckthorn genomics research at Guru Gobind Singh
	Indraprastha University, New Delhi, India
02.20 PM onwards	
T. Shpitalnaya	Introduction research on seabuckthorn ( <i>Hippophae rhamnoides</i>
Paiu	L.) in Belarus
Raju Soolanayakanahally	RNA-sequence analysis of Seabuckthorn ( <i>Hippophae spp.</i> ): <i>De novo</i> transcriptome assembly, functional annotation and
Socialiayakananany	identification of molecular markers
S.N.Raina	DNA markers as useful genetic markers for analysis of genetic
	diversity, taxon identification and phylogenetic relationships in
	Hippophae L.
Pratap Jyoti Handique	Hippophae genetic resources of North East India: Diversity,
	traditional uses and antioxidant potential
R. K. Rana	Seabuckthorn (Hippophae salicifolia D. Don.): As a horticulture
	crop for cold desert area of Lahaul and Spiti district in Himachal
	Pradesh, India
R. K. Rana	Selection of high yielding land races of seabuckthorn from wild
	seedling population of Lahaul and Spiti district of Himachal
	Pradesh, India
03.30-03.50 PM	Tea break
Hamid Ahani	Iranian Seabuckthorn ( <i>Elaeagnus rhamnoides</i> (L.) A. Nelson)
	seed germination
Dechinlkhundev	Distribution and genetic resource of Mongolian natural wild

Oyungerel	Seabuckthorn (Hippophae rhamnoides)
Netrapal Sharma	Genetic divergence among seabuckthorn (Hippophae sps. L)
	using molecular marker based analysis with respect to seed
	protein and anti-oxidant properties
Hamid Ahani	DNA quality and quantity of Seabuckthorn (Hippophae rhamnoides) subspecies in Iran and China
Anil Kant	Cross-species application of female specific markers and Sex- Biased Gene Expression in Seabuckthorn
05.00 PM	Chairman's remarks
07.00-08.30 PM	Cultural programme at A.P. Shinde auditorium, NASC Complex
08.30 PM	Dinner at dining hall, NASC complex

## Wednesday, November 25, 2015

# **Technical session IV: Phytochemistry**

**Venue:** Committee room, NASC Complex **Time:** 09.30 AM-01.15 PM

Chairpersons: A.K. Singh Rapporteur: Jigni Mishra

09:30-09.50 AM	Key note address: A. Banerji
	Molecular characterizations and bioactivities of isolated
	seabuckthorn constituents
09.50 AM onwards	
Mr. Sukumar Purohit'	Physico-chemical characterization of pulp and seed oils of
	Seabuckthorn ( <i>Hippophae salicifolia</i> D. Don) from Tawang
	district of Arunachal Pradesh, North Eastern India
A.Banerji	Application of seabuckthorn constituents for the green
	synthesis of nano materials
D. Acharya	Seabuckthorn- A rich source of bioactive tocopherols and
	tocotrienols
A. Sinha	Diversity characterization of seabuckthorn (Hippophae L.)
	resources from the Himalayas on biochemical basis
11.00-11.20 AM	Tea Break
Nathalia V.Goremyikina	Glyceride composition of seabuckthorn oil of Altai territory of
	Russia
Cheng-Jiang Ruan	Metabolic profiles of berry quality in Seabuckthorn (Hippophae
	L.) using untargeted GC-MS approach
Isis Von Ulardt	Effect of dehulling on chemical composition of seabuckthorn
	seed and its main constituents
Jigni Mishra	HPTLC Characterization of Phytoconstituents in seabuckthorn
	Leaves: A Comparative Study of Different Species
Ke Dong	Optimizing extraction technique of Ursolic Acid from
	Seabuckthorn by response surface methodology
1.10 PM	Chairman's remarks
1.15 PM	Lunch at dining hall, NASC Complex

#### **Technical Session V: Medical research**

**Venue:** A.P. Shinde auditorium, NASC Complex **Time:** 09.30 AM-01.15 PM

**Chairpersons:** R.C. Sawhney & Baoru Yang Rapporteur: Petra Larmo

09:30-09.50 AM	Key note address: Madhu Bala
	Himalayan seabuckthorn and radio-protection
09.50 AM onwards	
Petra Larmo	Seabuckthorn oil has beneficial effects on mucous membranes
	of intimate area in oral and topical applications
Yuki Kimura	Oral administration of Seabuckthorn (Hippophae rhamnoides)
	pulp oils restores tear secretion capacity in a mouse dry eye
	model
Nishat Anjum	Flavonoid constituents, total polyphenol and antioxidant
-	efficacy of <i>Hippophae rhamnoides</i> L. Berries
G.P. Dubey	Neurogenic hyperhomocysteinemia associated with life style
	disorders- its prevention and management by Seabuckthorn (Hippophae rhamnoides)
Padma Gurmet	An introduction to rich medicinal uses of Seabuckthorn in Sowa-
radilla Guilliet	Rigpa (Tibetan Medicine)
Hua Chen	Composition, antioxidant and antiglycemic activity of flavonoids
inda circii	from defatted seabuckthorn seed residues
11.00-11.20 AM	Tea Break
	Investigating the antioxidant properties and Rutin content of
Aliye Aras Perk	Seabuckthorn (Hippophae rhamnoides L.) leaves and branches
Basi Charre	Protective effect of Seabuckthorn (Hippophae rhamnoides L.) In
Manju Sharma	STZ -Induced Lipid Peroxidation and β- cell damage in rat
	pancreas
Boows Vona	Effects of Seabuckthorn juice and L-quebrachitol on type-2
Baoru Yang	diabetes mellitus in db/db mice
	Future presents of Himporhay solicitations a purture continui
Priyanka Sharma	Future prospects of Hippophae salicifolia as a nutraceutical
	drug: An adaptogenic approach
M.Selvamuthukumaran	Effect of feeding of seabuckthorn products on assessment of
w.selvamutnukumaran	liver and renal function in albino rat model
	Application of agriched fraction of sachualtham (History
M. S. Yogendra Kumar	Application of enriched fraction of seabuckthorn (Hippophae rhamnoides L.) leaf extract as antimicrobial finish on technical
ivi. 5. Yogenara Kumar	textile
	textile
Shivapriya Shivakumar	Evaluation of neuroprotective effect of Hippophae rhamnoides
	L. in Human neural cell line IMR32 against stress induced
	cytotoxicity
1.10 PM	Chairman's remarks
1.15 PM	Lunch at Dining hall, NASC Complex

# **Technical Session VI:** Processing technologies/ product development & trade

**Venue:** Committee room, NASC complex **Time:** 02.00-05.00 PM **Chairpersons:** Jörg-Thomas Moersel & Y.S. Dhaliwal **Rapporteur:** Rakesh Sharma

02.00-2.20 PM	<b>Key note address: Alphonsus Utioh</b> Advancement in processing technologies of seabuckthorn fruit
	and leaves
02.20 PM onwards	
Y. S. Dhaliwal	Nutritional quality and acceptability of food products prepared from seabuckthorn berries (Hippophae salicifolia) grown in Lahaul valley of Himachal Pradesh
V.K. Sharma	Evaluation of efficacy of seabuckthorn leaves ( <i>Hippophae</i> L.) as protein replacer in broiler (poultry) diet and its effect on cost of production
Galina Zvaigzne	Effect of processing techniques on Seabuckthorn juice and Seabuckthorn beverages
Jörg-Thomas Moersel	Comparison of biochemical properties of Seabuckthorn varieties of different origin
Bhavana Sharma	Extraction and purification of dual functioning AFPs from Hippophae rhamnoides seedling berry and leaf
Satish Kumar Sharma	Enrichment of health enhancing properties by use of Seabuckthorn (Hippophae salicifolia) pulp in preparation of sweet orange (Citrus sinensis) ready-to-serve beverage
Sheichenko Peprovna	Production and standardizing polyphenols of Seabuckthorn
03.30-03.50 PM	Tea break
R. Verma	Formulation and quality evaluation of seabuckthorn blended sand pear squash
S. M. Wani	Response surface methodology approach for optimizing extraction conditions for antioxidants from seabuckthorn leaf (Hippophae rhamnoides L.)
Rakesh Sharma	Development of functional wines from seabuckthorn (Hippophae rhamnoides L.) growing in dry regions of Indian Himalayas
Li Xiangjun	Market trends and promotion strategy research on seabuckthorn deep processing products
Sheng Wenjun	Optimization of Seabuckthorn Puree Sterilization Conditions by High Hydrostatic Pressure Processing and Its Effect on Antioxidant Ingredients
05.00 PM	Chairman's remarks
06.00-08.30 PM	Meeting of International Seabuckthorn Association (ISA) Venue: Committee Room, NASC complex
08.30 PM	Dinner at dining hall, NASC complex

#### **Technical Session VII: Biomedical Research**

Venue: A.P. Shinde auditorium, NASC complex Time: 02.00-05.00 PM

Chairpersons: H. Kallio & D.C. Katoch Rapporteur: Asheesh Gupta

02.00-2.20 PM	Key note address: Sashi Bala Singh
02.00-2.20 1 141	Role of seabuckthorn in combating high altitude related health
	problems
02.20 PM onwards	
	Wound Healing and Anti-Stress Prospective of Seabuckthorn
Asheesh Gupta	(H. rhamnoides L.)
Anna Spiegel	In vitro and in vivo investigations of innovative natural
	cosmetic products, enriched with Seabuckthorn leaf extract
Geetha Suryakumar	Seabuckthorn (Hippophae rhamnoides L.) enhances hypoxic
	tolerance: Role of hypoxia responsive proteins
Mandeep Sharma	in-vitro and in-vivo microbiological studies revealed potential
Wandeep Sharma	antimicrobial properties of seabuckthorn (Hippophae L.)
S.P. Tyagi	The comparative therapeutic efficacy of the combination of
on riyag.	seabuckthorn seed oil and misoprostol or sucralfate in gastric
	ulcers and erosions in dogs
Amit Kumar	Synergistic efficacy of combination of seabuckthron seed oil
	and famotidine or lansoprazole for treatment of gastric ulcers
	and erosions in dogs
Lilly Ganju	A potent Herbal agent for enhancing immunogenicity of
02 20 02 50 DM	Vaccines Tea break
03.30-03.50 PM	Studies on cardioprotective role of seabuckthorn oil
D.S. Arya	Evaluation of Anti-Cataract Potential of Seabuckthorn Leaf
Suchita Dubey	Extract
•	Extract
	Seabuckthorn leaf extract imparts tolerance to acute hypobaric
Gaurav Kumar Keshri	hypoxic in skeletal muscle of rats through differential activation
	of energy metabolism and endogenous antioxidants
C. Varshneya	Anti- diabetogenic potential of Seabuckthorn (Hippophae
- 1 -	rhamnoides) leaves
	Oral administration of seabuckthorn fruit extract attenuates
Farhat Batool	repeated restraint-induced behavioral deficits and increases
	serotonergic metabolism in hypothalamus: Evidence for an
	antidepressant-like profile  The effect of seabuckthorn fruit juice on the blood lipid
Yumei Zhang	regulation of fatty rats model
	Seabuckthorn fruit with high level of quebrachitol on
Ai Zhao	hyoerlipidemia rats and the mechanism on inflamation factors
05.00 PM	Chairman's remarks
0600-08.30 PM	Meeting of International Seabuckthorn Association (ISA)
3000 00:00 1 111	Venue: Committee Room, NASC complex
08.30 PM	Dinner at Dining hall, NASC complex
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## Thursday, November 26, 2015

## **Technical Session VIII: Policy issues on Seabuckthorn**

**Venue: A.P. Shinde auditorium, NASC complex Time:** 09.30 AM-01.30 PM

Chairpersons: R.C. Sawhney & Virendra Singh Rapporteur: Madhu Bala

09.30 AM -10.00 AM	Recommendations by Chairpersons of various technical sessions
10.00 AM-10.15 AM	Natalia Demidova-Seabuckthorn development and utilization in Russia
10.15 AM -10.30 AM	Xia Jingfang- Seabuckthorn development and utilization in China
10.30 AM -10.45 AM	Jörg-Thomas Moersel- Seabuckthorn development and utilization in Germany
10.45 AM -11.00 AM	Virendra Singh-Seabuckthorn development and utilization in India
11.00-11.30 AM	Tea break
- onwards	
11.30 AM-12.00 Noon	Panel Discussion on Reforms on policy issues to promote seabuckthorn development
12.00 Noon-12.45 PM	Speeches by Policy makers
12.45 PM-1.00 PM	Concluding remarks by Chairman
01.00-01.30 PM	<ul> <li>Closing ceremony:</li> <li>Announcement of next conference by Tai Yuanlin</li> <li>Statement by next host</li> <li>Vote of thanks by Virendra Singh</li> </ul>
01.30-02.15 PM	Lunch at dining hall, NASC Complex
3.30 PM	Visit of foreign delegates to Kingdom of Dreams etc., National Capital Region, Gurgaon

Note: November 27-29, 2015: Excursion tour of some foreign delegates to Jaipur-Agra or Leh (3 days) & back to Sidharth hotel/ NASC Complex, Delhi on 30<sup>th</sup> November at 5 PM & then to airport.