# PROCEEDINGS OF THE

# 12th

# NATIONAL HORTICULTURE SEMINAR 2021

4-5<sup>th</sup> March 2021, Kirtipur, Kathmandu, Nepal Theme: "Post COVID Horticulture for Food and Nutrition Security"



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## **Foreword**

The year 2020 passed with the fear of Corona pandemic. Most returnees from abroad, India and from cities of Nepal went back to their respective villages and engaged in agriculture/horticulture for their livelihood. The physiographic settings, different ecological zones and varied microclimates of Nepal favor for growing different fruits, vegetables and other several horticultural crops of economic importance. These crops have



contributed to fight against Corona-pandemic improving food and nutritional security and livelihoods of the people living in diversified physiographic regions of Nepal. With these learnings, Nepal Horticulture Society (NHS) decided to organize its 12<sup>th</sup> National Horticulture Seminar in collaboration with National Center for Potato, Vegetable and Spice Crop Development and National Center for Fruit Development with the theme of "Post Covid Horticulture for Food and Nutrition Security and Income Generation".

The 12<sup>th</sup> National Horticulture Seminar was successfully organized during 4<sup>th</sup> to 5<sup>th</sup> March 2021 (Phalgun 20 and 21, 2077) where three theme papers, three strategic papers, 10 technical papers and 15 posters were presented. This 12<sup>th</sup> Proceeding at your hand is the outcome of the 12<sup>th</sup> National Horticulture Seminar. To bring this proceeding in this shape in time, NHS Editorial Board Members, Editor in Chief Dr. Shanta Man Shakya, Associate Editor Dr. Puspa Raj Paudel, Editor Members Dr. Umed Pun, Dr. Umesh Acharya, Dr. Kishor Dahal, Mr. Arun Kafle and Editor Member Secretary Mr. Padma Nath Atreya worked very hard. I sincerely express my gratitude and thanks to the editorial team for their untiring and commendable works they performed. I also express my sincere thanks to the main organizing committee and different sub-committees for their hard work and commitments for the success of the seminar and publication of this proceeding.

This proceeding of 12<sup>th</sup> National Horticulture Seminar includes the selected and accepted papers, abstracts of the posters to serve as technical information and reference materials. As the President of the Society, I highly acknowledge and appreciate the authors of the papers and the poster presenters for their valuable contributions. The society believes that the information presented in the proceeding would be of great practical value to the related stakeholders. The institutions and individuals who supported the seminar and publication of this proceeding are highly acknowledged. Nepal Horticulture Society expects your continued support and cooperation in the days to come as well. Thank you very much.

Indra Raj Pandey

President

**Nepal Horticulture society** 



Nepal Horticulture Society (NHS) organized its two days 12<sup>th</sup> National Horticulture Seminar in Kirtipur, Kathmandu, Nepal on 20<sup>th</sup> and 21<sup>st</sup> Falgun, 2077 (March 4-5, 2021) in collaboration with National Center for Potato, Vegetable and Spice Development, Kirtipur and National Center for Fruit Development, Kirtipur. With the theme of "Post Covid Horticulture for Food and Nutrition Security, and Income Generation" the seminar was organized with major objectives of analyzing the situation of the post covid Nepalese horticulture, identifying major challenges in this sector and delineating ways forward.

The proceeding consists of three thematic papers, three strategic papers, ten technical papers, seven provincial status papers and fifteen posters presented during the seminar. The Editorial Committee highly acknowledges all the authors of the papers and poster presenters for their valuable contributions. It also acknowledges the valuable support of the paper reviewers. The Committee believes that the information presented in the proceedings would be of immense value to the related stakeholders.

The facts, figures, subject matters as well as the opinion expressed in the papers/posters are purely of the respective author(s) and the Editorial Committee has nothing to do in it except that it did general editing works to bring it to an orderly shape. The institutions and individuals who supported the publication work of the proceedings are highly acknowledged and the Committee hopes for their continued cooperation and help in the future too. Thanks and stay safe from the covid pandemic!

The Editorial Committee 12<sup>th</sup> National Horticulture Seminar