

National Centre for Organic Agriculture, Yusipang

Department of Agriculture Ministry of Agriculture and Forests, Thimphu, Bhutan

A NEWLY RELEASED POTATO VARIETY

YUSI MAAP-2



Potatoes, once commonly grown as a homestead crop is one of the most traded and consumed crops in Bhutan. Currently, farmers residing in mid and high-altitude areas of Bumthang, Haa, Chukha, Monggar, Trashigang, Thimphu, Paro etc. depend on potato crop for their livelihood. Pursuant to achieving better livelihood outcomes for the farmers and given the national significance of potato crop, National Potato Program (NPP) under National Centre for Organic Agriculture (NCOA) released CIP720123 (popularly known as Janak Dev in Nepal) after rigorous two years of successful adaptive multilocation trials in Bhutan. The Variety Release Committee (VRC) of the Department of Agriculture has endorsed and released as a Yusi Maap-2 potato variety on 27 June 2022.

> Mean potato yield and farmers' preference votes (PVS) A NEWLY RELEASED POTATO VARIETY YUSI MAAP-2 Desiree (Check) Yusi Maap-2 Yusi Maap Khumal Rato-2 **Potato Varieties** Total Votes (Female +Male)

Figure 1.Multilocation average trial yields (Bumthang, Khangma and Yusipang) of potato varieties

Physical characteristics of newly released (CIP720123) Yusi Maap-2 potato variety

1.Flesh color: Red-skinned, white creamy and high yielding (larger tuber) preferred by Bhutanese farmers 2. Days to maturity: 100- 120 days

3. Recommended agroecology: For both the mid and high-altitude zones during normal season and also, low elevations during winter (off-season production) across Bhutan.

4. Average Yield: 10-12 tons/acre.

Unlike other potato varieties released in the past, the Yusi Maap-2 besides being high yielding, is also highly resistant to late-blight which is one of the major issues faced by the majority of potato growers in the world including Bhutan. Further, this variety is well suited for both organic and conventional farming and farmers can now manage the late-blight problem without having to resort to fungicide application. In addition, due to its red tuber color which are in concurrence to farmers' need and comparatively larger tuber size than the local Desiree variety, it is likely that this variety would receive better acceptance and faster adoption in the country. The mean yield difference of this variety from our research trials showed as much as 1.4 times higher than that of local variety Desiree. In other words, on an average, YusiMaap would yield 30% (round-off) more than the Desiree variety. Thus, release of Yusi Maap-2 is expected to bring considerable benefits to the farmers in terms of productivity and addressing

Vegetative growth: Lateblight resistant & healthy

late-blight disease conundrum.



Flower color: Pinkish white



Tuber color and shape: Red and oblong



Authors: Pradeep Rai, YadunathBajgai (PhD)

Contact team: Yadunath Bajgai (PhD), Pradeep Rai, Lobzang, Sangay,

Tshering Lhadon (NCOA) & Kuenzang (ARDSC-Khangma)

National Potato Program

National Centre for Organic Agriculture, Yusipang, Thimphu

