

## Machine for direct harvest of seed mixtures from species-rich flowering meadows

NIBIO Landvik is Norway's national center flowering meadows and native seed. From this research center, Ellen Svalheim (NIBIO Dept. for Cultural landscapes and biodiversity), coordinates the surveillance and management of more than 800 protected, high-diversity meadows throughout the country. Trygve S. Aamlid (NIBIO Dept. Urban Greening and Vegetation Ecology), is responsible for seed production of more than 30 flowering herbs in monoculture at the center. Supported by the Norwegian Environmental Agency, our goal is the provision of wild flower seed mixtures for different regions in Norway. After starting in 2017, we reached a total production of ca. 150 kg wild flower seed in 2020.

As an alternative to seed production in monocultures, we are now starting a new project in which seed of various species will be harvested jointly from selected species-rich donor meadows. We see a special need for this type of local seed for protected and nature conservation areas.

To accomplish this, we need a self-propelled seed harvester that meets the following specifications (please elaborate on each of the points mentioned below):

- Can be used in steep slopes and on uneven surfaces
- Solid, yet with maximum weight of 150 kg.
- Adjustable speed depending on canopy density
- Adjustable height 30 cm to > 100 cm to accommodate various types of meadows
- Not too rough / aggressive (preferably adjustable) in its harvest operation and therefore not harmful to seed germination.
- Large enough / capacity to harvest seed from 1 ha in one day
- Easy to transport from one location to another, e.g. on a small trailer
- Easy to operate, empty and clean
- Easy maintenance and replacement of parts
- Price not higher than 32.000 Euro, including freight to Norway
- Delivery not later than 15 May 2021