

# *Murdannia keisak* Wart removing herb

## Introduction

Forty members of the genus *Murdannia* occur in tropical and subtropical regions worldwide. In China, 20 species have been recorded, most of which occur south of the Yangtze River <sup>[69]</sup>.



## Species of *Murdannia* in China

Scientific Name	Scientific Name
<i>M. bracteata</i> (C. B. Clarke) J. K. Morton ex Hong	<i>M. medica</i> (Lour.) Hong
<i>M. citrina</i> D. Fang	<i>M. nudiflora</i> (L.) Brenan
<i>M. divergens</i> (C. B. Clarke) Brückn.	<i>M. simplex</i> (Vahl) Brenan
<i>M. edulis</i> (Stokes) Faden	<i>M. spectabilis</i> (Kurz) Faden
<i>M. hookeri</i> (C. B. Clark.) Brückn.	<i>M. spirata</i> (L.) Brückn
<i>M. japonica</i> (Thunb.) Faden	<i>M. stenothyrsa</i> (Diels) Hand. -Mazz.
<i>M. kainantensis</i> (Masam.) Hong	<i>M. triquetra</i> (Wall.) Brückn.
<b><i>M. keisak</i> (Hassk.) Hand. -Mazz.</b>	<i>M. undulata</i> Hong
<i>M. loriformis</i> (Hassk.) Rolla Rao et Kammathy	<i>M. vaginata</i> (L.) Brückn.
<i>M. macrocarpa</i> Hong	<i>M. yunnanensis</i> Hong

## Taxonomy

**Order:** Commelinales

**Suborder:** Commelinineae

**Family:** Commelinaceae

**Genus:** *Murdannia* Royle

**Section:** Pauciflorae Brückn

**Species:** *Murdannia keisak* (Hassk.) Hand.-Mazz.

## Description

*Murdannia keisak* is a glabrous perennial herb that has fibrous, horizontal, elongate rhizomes. The decumbent stems are 40 cm in length. Internodes are 8 cm long, and have densely, white hairs. Leaves are sessile, spreading or slightly folded, linear-lanceolate or linear-elliptic, 2-8 cm

long and 5-8 mm wide, acuminate apex, with a ciliate base extending by a line of hairs on the leaf sheath. A solitary flower appears in the axil or terminally on the peduncle 1-4 cm long. The linear bract is situated in the middle of the peduncle. Sepals are narrowly oblong, 6-10 mm in length. The obovate petals are pink, purplish red, blue-purple, or grayish blue. Filaments are covered with dense, long hairs. Capsules are narrowly ovoid, trigonous, 5-10 mm long and 2-3 mm wide, acute to nearly acuminate at both ends. There are 4 uniseriate, gray, slightly flattened seeds per valve. Flowers appear August through September.<sup>[70]</sup>

## Fungi

Phylum	Family	Species	H. R.	Ref.
Basidiomycota	Pucciniaceae	<i>Puccinia adihikarii</i> Ono	po	[170]

## Habitat

*M. keisak* prefers wet places such as ditch sides, flooded paddy field margins and shaded areas along roadsides<sup>[110, 115, 145]</sup>.

## Distribution

*M. keisak* distribution includes southern Fujian, northern Jiangxi, eastern Jilin, Liaoning, and northeastern Zhejiang, also Anhui<sup>[38]</sup>, Guizhou<sup>[110]</sup>, Heilongjiang<sup>[223]</sup>, Henan<sup>[30]</sup>, Hubei<sup>[53]</sup>, Hunan, Jilin<sup>[223]</sup> provinces, and Taiwan<sup>[77]</sup>.

## Economic Importance

*M. keisak* is a common weed of paddy fields. Occurrence is sparse. The stems and leaves can be used as livestock forage<sup>[7]</sup>.

## Related Species

*M. triquetra* (Wall.) Brückn., shares similar habitat, appearance and distribution to *M. keisaki*, however, it has a long ellipsoid, trigonous capsule 8-10 mm long and 2-3 mm wide, and acute at both ends<sup>[69, 70]</sup>.

## Natural Enemies of *Murdannia*

At least one fungal species is associated with the genus *Murdannia*.