Tulipa jansii, J.J. de Groot, Zonn, Spec. Nova.

Description: The bulbs are pear-shaped (Fig.13) with a strong, reddish-brown tunic which inside is covered with short felted hair at the nose. The stem is 123 mm long, the whole stem is greenish with a brown haze, and is hairless. The three leaves are narrow spear-shaped, glaucous green, straight, and channelled. The narrow, translucent margins are covered with short hairs. The basal leaf is on soil level and 108 x 9 mm. The second leaf is 84 x 4 mm, and the third leaf is 76 x 3,5 mm. The pointed, yellow flower (Fig.14) has spear-shaped outer tepals, 30 x 10 mm, the tip and nearby margins are covered with short hairs. The inner tepals are obovate, 28 x 11 mm. The yellow stamens are equal in length and are 11 mm long, including narrow almost straight filaments of 5 mm. The straight, light-green ovary is 8 mm long. The stigma is yellow with protruding lobes.

Note: *T. jansii* is the only member of the *Kolpakovskianae* that forms stolons.

T. jansii is a member of the subgenus Kolpakowskianae and finds its habitat in sheltered places in the steppe area which lies between the western foot hills of the Dzungarian Alatau to the east and the Chu and Ily Mountains to the west in the Almaty Oblast of SE Kazakhstan. Type form; wild collected material from the Ily valley north of Kapchagay, holotype, L4513065

This species was first found in 2005 when visiting in Kazakhstan a growth site of T. behmiana, at the base of a rock a yellow patch was seen that appeared to consist of more than a hundred flowering tulips in a few square meters. At first it was mistaken for a longstemmed form of the steppe species *T. kolpakowskiana* but later in the day at another place, again at the base of a rock a population of red flowering tulips was found, looking all exactly the same. Among the bushes nearby grew populations of yellow, orange and red forms all in groups of the same colour. Excavation of some bulbs revealed them to be particularly small and with stolons. Also, these bulbs lacked the long fibrous top of T. kolpakovskiana. This year 2023, when visited this site again there appeared to be only a few flowering plants and some non-flowering plants, half the size of the plants in earlier visits. In another year, further east, along the road to Taldygoran, we found this tulip growing in large quantities among the rows of trees planted there. They serve to keep the roads and railroad lines free from the steppe-derived drifting snow in winter.

This newly described species grows north and partly together with the steppe tulip T. kolpakovskyana, in the east its range borders that of T. corynestemon. In culture, it is a difficult to grow species that quickly dies out.

*T. jansii* is named after <u>Harry Jans</u>, a well-known world traveller in whose company we were able to collect this spring herbarium material of this tulip.



Fig.13 Bulbs and seedpod of *T. jansii* 



Fig.14 Flower parts of *T. jansii* 



Fig.15 view on the Ili River valley with, in front, *T. talievii* Vved. (buhseana) and Gagea spec.

Table 3 Comparison of *T. jansii* with *T. kolpakovskiana* and *T. corynestemon* 

	T. kolpakowskiana	T. jansii	T. corynestemon
Bulb	hard tunic with fibres above the bulb	hard tunic without fibres	tunic papery, elongated
Covering on the inside of the bulb tuni	short hairs at the top	short hairs at the top	short felty hairs, at the top sometimes at the bottom
Plantform	short, sometimes elongated	elongated	elongated
Leaves	commonly three with few hairs on the margins	commonly three with short hairs on the margins	four with minute short hairs on the margins
Filaments	broad elongated, obovate	narrow, almost straight	straight with a broad club- shaped top
Anthers	yellow	yellow	yellow
DNA 2c Value	39.9 pg per nucleus	41.3 pg per nucleus	39.6 pg per nucleus



Fig.16 On the left *T. jansii* and on the right *T. kolpakowskiana* 



Fig.17 T. jansii, yellow form, at the type location

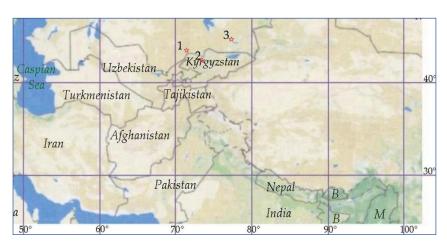


Left, Fig.18 T. jansii, red form

Right, Fig.19 T. jansii, population with mixed colours

Distribution map,

- 1 T. kujukense,
- 2 T. laskovii,
- 3 T. jansii.



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Left to right, flower parts of *T. kujukense, T. laskovii,* and *T. jansii*