## ADDITIONAL OBSERVATIONS ON THE MORPHOLOGY OF FRITILLARIA ERZURUMICA KASAPLIGIL

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Following the publication of Fritillaria erzurumica Kasapligil. I received several other finely preserved herbarium specimens including bulbs, fully open flowers and mature fruits of this taxon from a place not far from the type locality, collected by Mr. Sabri Ozyurt of the Atatürk University in Erzurum, Turkey. The newly arrived specimens (S. Özyurt No. 1429) were collected from the Northern slopes of Palandöken Mountains at a locality called Telsiz Tepe, 2500 m. above sea level, i.e. 400 m. below the type locality. Mr. Özyurt describes the habitat as mountain steppe with calcareous moist soil. I was very impressed with the large showy flowers of these specimens which were collected on May 21, 1971. The diameter of the saucer-shaped solitary flowers varies from 4 to 6 cm. while the length of the perianth segments ranges from 2.5 to 3.5 cm. All petals seem to be with entire margins without any lobation. The pistils appear fertile, giving rise to mature ovaries with abundant fertile seeds.

The capsules stipitate, reverse pear-shaped, slightly depressed at apex. Pericarp membranous, distinctly 6-angled, light brown on top, beige-colored all around except along the angles which are also light brown. Gradually tapering base of capsule is marked by a dark brown ring formed by six scars of perianth segments. The length of the capsules varies from 2.2 to 3.0 cm. and their width at the upper broad portions ranges from 1.5 to 1.8 cm.

The seeds are anatropous, flat, pyriform in outline, narrowly winged all around, 7-8 mm. long and 5-6 mm. wide. The seed coat is light brown and obscurely reticulate on both surfaces. A rudimentary type, straight embryo is approximately 1 mm. long and 0.5 mm. wide. A single vascular strand extending through the raphe reaches the chalazal end of the endosperm.

Recently, three new species of Fritillaria from eastern Turkey were published by E.M. Rix (Notes from the Roy. Bot. Gard. Edinburgh 31: 125-129, 1971). Although I have not seen the type specimen of F. alburyana Rix, the description and illustrations of this taxon show close similarities to F. erzurumica. However, the nectaries on the perianth segments of F. erzurumica are well developed and unlike the cylindrical capsules of F. alburyana, the fruit of F. erzurumica is reversed pyriform. Therefore, a closer examination of these two taxa would be desirable.

In my previous article (Phytologia 22: 1-5, Aug, 1971), the

holotype for F. erzurumica was inadvertently indicated together with its isotype. The location of the holotype of F. erzurumica as well as of F. erzurumica var. abortivus is U.C. Berkeley, while the location of the isotypes of both taxa is the Herbarium of the Atatürk University in Erzurum.

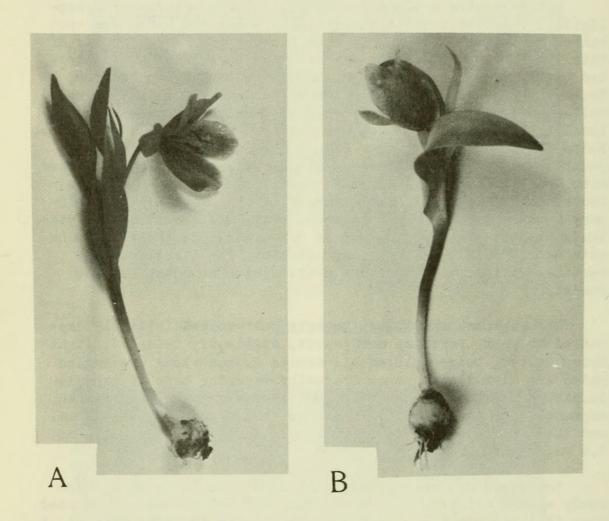


Fig. A- Fritillaria erzurumica with a slightly nodding flower and a spherical bulb. Fig. B- Another specimen of the same taxon with an ascending flower and an oval bulb. Both photographs courtesy of Mr. Sabri Özyurt.



Kasapligil, Baki. 1972. "Additional observations on the morphology of Fritillaria erzurumica Kasapligil." *Phytologia* 22(6), 439–440.

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