

H_2SO_4 TREATMENT HELPS EARLY GERMINATION OF *GLEDITSCHIA TRIACANTHOS* SEED

*Note by Mahmood Iqbal Sheikh**

Gleditschia triacanthos, Linn. (Dozakh) a large deciduous tree from U.S.A. has a wide range of adaptation starting from the plains right upto 2200 m above sea level. In some recent studies, it has turned out to be a very hardy species and has survived the extremely cold and dry conditions of Ziarat (Baluchistan).

Apart from being a good source of fuel and timber, the leaves and pods, are a palatable and nutritious feed for the cattle and goats.

Seed is available from localities such as Parachinar, Abbottabad, Peshawar, Changa Manga etc. in the months of November-December. When sown the seed takes 6-12 months for complete germination.

In order to break the dormancy the seed was treated with concentrated H_2SO_4 for 5, 15 and 30 minutes. The treated seeds were thoroughly washed with water before sowing in polythene tubes. The four treatments were replicated 5 times, 20 seeds sown in each replication. The seeds were treated and sown on 29-5-1977. Germination started on 1-6-1977. The germination record upto 30-6-1977 is as follows:

Replication	H_2SO_4 Treatment			
	5	15	30	
I	1	—	17	1
II	—	1	13	1
III	1	—	15	—
IV	—	—	15	1
V	2	2	17	—
Total	4	3	77	3

*The author is Director, Forestry Research Division at the Pakistan Forest Institute, Peshawar.

The experiment was repeated on 13-6-1977. Germination started on 16-6-1977. The germination records upto 30-6-1977 are as follows:

	Treatments			
	H ₂ SO ₄ Treatment			
	5	15	30	1
I	2	3	15	—
II	2	7	16	—
III	—	5	12	—
IV	1	4	15	—
V	3	3	14	—
Total	8	22	72	1

Thus seed germination was significantly increased by soalsing in concentrated H₂SO₄ for 30 minutes.