## The Influence of Growth Regulators on Storage

The grapes, in general, have a short post-harvest life and deteriorate rapidly and trials were undertaken to evaluate the effectiveness of regulators. The regulators B-9 (2000 ppm), Cycocel (2000 ppm), Phosfon-D (500 ppm), MH (500 ppm) and TIBA (500 ppm) were employed to study the influence on the storage of Anab-e-Shahi berries. The first spraying was given during prebloom period, a second application at full bloom and a third spraying when the berries were maturing. The bunches were stored under room temperature

and in the cold room at 0°C to study the effect of these chemicals on the keeping quality of fruits.

The results on the percentage of spoiled berries in room temperature (Table 1) and at 0°C (Table 2) showed that the berries did not develop spoilage symptoms till 7 days after storage in room temperature and 55 days in the cold room. On the eighteenth day 14.1 per cent of the treated berries and 39.4 per cent of the control were spoiled in room temperature mostly

TABLE 1. Percentage of spoilage of berries stored at room temperature.

Treatment	1722 8 728 mags	Days after 10	storage	isia Insl <sup>2</sup> 14	100 x
-9 1	37.6	41.4	16.3	4.7	aut houseed
N. MOHAMED SHERIF	22.5	34.3	30.0	13.2	heritance or
W. MOHĀMED ALIKHA R. EVEERASWAM	29.1	33.5	19.8	E 8 17.6	ark pods in F
Cycocel Agianevia	6.9	13.9	ni (neergan) in	31.9	6.2
2	6.8	23.9	40.0 xe	29.3	en 6t al.=(1
ENCES E	11.1	24.7	OW1 OT 20.4 26	100038.20	to some 5.0
	() n.7.10 200	24.2	36.6	32.1	Incomplete
Phosfon - D 1	10.2	24.7	-9291q 901 01 26.1 <sub>100</sub>	39.0	study also
he Pigeof Pea (Cajanus enent. is iture and utili	voian 8.2	27.9	Jud 210136.6	27.3	Controlled I
waii Agri. Station Bull	10.7	30.2	12.2	40 9	6.0
and R. VEERASWAMY	17.4	41.7	7.11ne inter-	b18013.7	990615.6
nced in Red gram (Cara-	16.3	37.4	18.3	14.6	14.0
Hot. 14:237.42.	23.2	54.9	14.0	7.9	varf muta
ties in the interval AllT	15.5	36.3	bas 10.20.8	27.4	All the F.
ag. Spec. Res. 100.	16.2	38.1	24.6	21.1	Like the CO
Control Santa Sant	34.5	Wene 2 40.9	19.0	5.6	Lure. The

<sup>1 -</sup> One spraying

<sup>2 -</sup> Two sprayings

<sup>3 -</sup> Three sprayings

TABLE 2. Percentage of spoilage of berries stored at 0° C

Treatment	60 Perce	ntage of berries 65	s sp <b>oile</b> d <b>af</b> ter (Days 70	75	80
B - 9 8 diw 15	m 2.71 to 4.5	40.0	52.10 200	18V ni 7.9Vo10	1981 - QI 916 - BY <b>62</b> 28
of the highest	er cent +, 0.0	42.4	48.5	9.1	ne state
Vino sew 3	cient of varia	34.2	49.8	Iso to 0.0 unan	5 50 5 7.0 0
Cycocel (ISU) 1	t. The_ash.c	12_per gen	29.7	68.30 A	12.0
s content varies	the phosphoru	also low.	20.0	54.3	25.7
rosst variation	er cent. The la	of -0-13 pc	14.0	1000 48.5 11 0	37.5
hosfon-D 1	cent)_wasko	99 047.1	43.0	9.9	lls this ob
se <sup>2</sup> t in highes	s K was big	53.9	37.2	8.9	Forty fi
noil gnignig	these types	42.9	42.4	uo bel 7.6 erew	2106 7.190
TBA 1	33 per cent'w	13.2	36.6	42.1	8.1
I VO) wol 2 is	rieties was a	8.4	34.2	39.8	17.6
3 content	The_ calcit	6.3	40.2	34.6	18.9
at higher turber	vas some.wn	compared of	13.5	48.3	38.2
mqq 8871 02 19	anged_from 42	tit crops litt	10.6	52.5	36.9
spom Jennings wing the com	in value of 921	with a mea	6.4	34.6	he 32.8
Control en sont		71-5	N was esti-	6.25, The total	re factor

mulsenge 1 - One spraying

due to berry shatter, fungal decay caused by Aspergillus and Rhizopus and browning and shrinkage of the berry stem and peduncles. The pulp also showed browning but the shrinkage of berries was not observed. Spoilage of berries increased every day and by the 12th day of storage, 87.8 per cent in 8-9 treatment, 78.7 per cent in TIBA, 65.0 per cent in Phosfon-D, 61.9 per cent in MH and 59.9 per cent in cycocel against 98.8 per cent in untreated bunches was noted. It is thus clear that the berries of Anab-e-Shahi could be kept without spoilage till seven days at room temperature and these regulators had no influence on the storage life of grapes under room temperature.

In cold room condition there was a spoilage of 28.5 per cent in the untreated bunches by 60 days. The degree of spoilage examined when 70 days after storage indicated the superiority of the treatments in extending the storage life over control with 46.4 per cent spoilage against complete decay of berries under the control. The spoilage in MH treatment was significantly lower and the repeat applications at higher concentrations were better than single application and due to MH treatment 35.9 per cent of the berries remained in sound condition even after 80 days of storage.

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<sup>2 —</sup> Two sprayings

<sup>3 —</sup> Three sprayings