

Table 2. The group means of the agronomic characters for division into 10 groups.

Group no.	Anth. date	Vigor rating	Seed length	Weight 200 seeds	Oil	C18:2	Number of accessions*
		scale 1 to 5	cm	g	%	%	
1	6 — 11	2.6	4.7	1.6	28.6	69.5	40
2	6 — 10	2.7	4.9	1.7	31.6	68.3	22
3	6 — 7	2.1	4.7	1.6	28.4	67.6	30
4	6 — 13	1.7	4.2	1.3	29.4	65.6	3
5	6 — 8	3.9	5.3	2.5	29.6	63.8	8
6	6 — 15	2.3	4.7	1.4	29.2	70.5	7
7	6 — 3	2.1	4.6	1.3	26.2	63.4	12
8	6 — 2	2.7	4.8	1.6	29.3	70.0	36
9	6 — 15	3.7	5.4	2.6	30.2	62.4	3
10	5 — 23	2.6	5.1	2.2	29.9	70.2	11
Pop x	6 — 6	2.5	4.8	1.7	29.0	68.3	177

*5 accessions not included in any group.

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VARIABILITY IN OIL CONTENT IN SEED OF *HELIANTHUS* SPP.

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ABSTRACT

Seed samples of a large number of wild sunflower species collected in the U.S.A. in 1980 were analysed for oil content by a NMR analyser. There was a considerable variability both among the species and among different populations of the same species. The analyses, which included all annual and a number of perennial species, found the oil contents to vary between 10 and 40%. The highest oil content, 35% on the average, was found in *H. anomalus* Blake; among the annual species, *H. annuus* L. had the lowest oil content (22%). Some populations of *H. anomalus* had as much as 40% of oil in seed which simplifies their introduction into our breeding program.

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