

**OIL CROPS:
BRASSICA
SUBNETWORK**

PROCEEDINGS OF THE
THIRD WORKSHOP, QUALITY
TRAINING, AND CHINESE
PROJECT REPORTS,
HELD IN SHANGHAI,
PEOPLE'S REPUBLIC OF CHINA,
21-24 APRIL 1990

ABBAS OMRAN

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Oil Crops: Brassica Subnetwork

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Edited by
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THE FAST DEVELOPING OILCROPS NETWORK

A SUMMARY REPORT

Abbas Omran

The Oilcrops Network Project and its constituent projects have an increasing role in enabling large number of small farm families to obtain their daily requirements of oils and fats. The project links together researchers working in a number of IDRC-supported oilcrop improvement projects and national research programmes. These projects are proving increasingly effective in raising edible oil production in several countries of Eastern/Southern Africa and South/South-East Asia

The Network is coordinated by an IDRC Network Advisor, based in Ethiopia at present. The Advisor organizes and facilitates all the Network and Sub-Networks workshops, committees and other meetings, edits and arranges publication of the workshop proceedings, Oilcrops newsletter, reviews, bibliographies and other publications. He visits and provides advice, assistance and encouragement to scientists in national programmes and especially the IDRC-assisted projects attached to the Network, and also provides assistance to the Ethiopian National Oilcrops Program which is supported by IDRC.

In Phase I (1981-84), initial steps were taken to link IDRC-supported national oilcrop research programmes in Eastern and Southern Africa and the Indian region. Phases II (1984-87) and III (1987-90) continued to strengthen and expand the Network to include additional countries such as China and the Philippines. For a more detailed description of the Network and its various activities please consult previous publications listed in the back.

THE SUB-NETWORKS

Four Sub-Networks were created:

1. Brassica Sub-Network, 1987.

2. Sunflower Sub-Network, 1988.
3. Sesame Subnetwork, 1988.
4. Other Oilcrops Sub-Network, 1989.

These Sub-Networks enabled scientists specializing in the various crops to interact more closely and economically in Sub-Network workshop, rather than in the larger Network meetings, and to organize successful collaborative research programmes.

INFORMATION

An effective oilcrops information system was developed to enable scientists to obtain the necessary specialized information on oilcrops. The Network publications, so far, includes:

- Riley, K.W. (editor). 1984. Oil Crops. Proceedings of a Workshop held in Cairo, Egypt, 3-8 September 1983. IDRC MR93e. 178 pp.
- Omran, A. (editor). 1984-1989. Oil Crops Newsletter Nos. 1-6, Published annually by the IDRC Oilcrops Network.
- . 1985. Oil Crops: Proceedings of the Second Oil Crops Network Workshop held in Hyderabad, India, 5-9 February 1985. IDRC MR105e. 258 pp.
- . 1987a. Oil Crops: Niger and Rapeseed/Mustard. Proceedings of the Third Oil Crops Network Workshop held in Addis Ababa, Ethiopia, 6-10 October 1986. IDRC MR153e. 250 pp.
- . 1987b. Oil Crops: The Brassica Subnetwork. Proceedings of the First Meeting of the Brassica Subnetwork held in Uppsala, Sweden, 7-9 May 1987. IDRC MR168e. 76 pp.
- Basudeo Singh and D.R.C. Bakhietia. 1987. Screening and Breeding Techniques for Aphid Resistance in Oleiferous

- Brassicaceae : A Review. Oil Crops Network, IDRC Canada. 50 pp.
- Omran, A. (editor). 1988. Oil Crops: Sunflower, Linseed, and Sesame. Proceedings of the Fourth Oil Crops Network Workshop held at Njoro, Kenya, 25-29 January 1988. IDRC MR205e. 340 pp.
 - Saharan, G.S. 1989. Sesame Diseases. An Annotated Bibliography from 1900-1988 literature. IDRC MR 227e. 75 pp.
 - Omran, A. (editor). 1990a. Oil Crops: Proceedings of the Three Meetings held at Pantnagar and Hyderabad, India, 4-17 January 1989. IDRC MR252e. 332 pp.
 - . 1990b. Oil Crops: Sesame and Sunflower Subnetworks. Proceedings of the Joint second Workshop held in Cairo, Egypt, 9-12 September 1989. IDRC MR271e. 222 pp.

COLLABORATION

By encouraging collaborative research between scientists in stronger research programmes (including Canada) with those in weaker programmes, and arranging peer review of research results and programmes in regular workshops and in other ways, the Network helps to raise scientific standards in the member countries. In order to make the most efficient use of

limited resources, the advisor is seeking to collaborate in any way possible with other Networks or Institutions involved in oilcrop research and development. In particular, collaboration is sought with IBPGR, the various FAO Networks and activities on oilcrops, as well as with CGIRC and ICRISAT. In order to make the needs for oilcrop research more widely known, and to enhance the resources available to the network and its members, the Advisor and all concerned informs other appropriate donors of the needs of the Network and its members, and invites their representatives to attend Network workshops and meetings.

GERMPLASM

After a slow start due to bureaucratic problems and national reluctance to share germplasm, a useful germplasm exchange programme has been developed through the Network coordination office. The Network Advisor coordinates the collection of germplasm both from member countries and from other sources, makes up nurseries and distributes them in a timely fashion to those members who request them, and who supply germplasm, Table 1. The Advisor also encourages and assists members to exchange germplasm bilaterally, either as part of collaborative research programmes, or in other ways.

Table 1. Oilcrops Network Nursery (up to April - 1990).

Country	Brassica	Linseed	Niger	Safflower	Sesame	Sunflower	Groundnut
Bhutan	4	-	1	-	-	-	-
Canada	-	-	-	3	-	45	-
Cyprus	-	-	-	6	-	-	-
Egypt	-	-	-	10	10	-	-
Ethiopia	5	4	8	3	9	8	-
FAO	-	-	-	-	49	-	-
India	31	2	-	2	-	-	-
Israel	-	-	-	-	21	-	-
Kenya	1	1	-	-	2	2	-
Mexico	1	-	1	7	11	7	-
Nicaragua	-	-	-	-	9	-	-
Nepal	11	2	1	-	1	-	4
Pakistan	-	-	-	3	-	-	-
Philippines	-	-	-	-	16	-	-
P.R.China	8	1	-	2	-	-	-
Somalia	-	-	-	-	13	-	-
Sri Lanka	-	-	-	-	3	-	-
Sudan	-	-	-	-	20	-	-
Sweden	8	-	-	-	-	-	-
Tanzania	-	-	-	-	9	-	-
Yugoslavia	-	-	-	-	-	16	-
Total	64	10	11	36	173	78	4

Since this workshop is devoted to Brassica, I shall list all Brassica germplasm lines/varieties received from and dispatched to Network countries in the past three years:

BHUTAN

1. Mongar Local
2. Yunkar Serti(local)
3. Bajo Lcoal
4. Baylegphug Local

ETHIOPIA

1. Yellow Dodolla
2. S-67
3. S-71
4. S-115
5. Awassa Population

INDIA

1. Mustard-Kranti
2. " -Krishna
3. " -RH-30
4. " -RK-1467(Vardan)
5. " -JRV-24 (Rohina)
6. " -RK-14 (Vaibhav)
7. " -Durgamani
8. " -Varuna
9. " -Pusa Bold
10. " -B-85 (Seeta)
11. " -RLM-198
12. " -RLM-619
13. " -RLM-514
14. " -RW-351
15. Toria -13-34 (Ayrani)
16. " -PT-30
17. " -TS-29
18. " -T-9
19. " -M-27
20. " -PT-303
21. " -TL-15
22. " -Sangam
23. " -Bhawani
24. Yell. Sarson-YSB-9(Benoy)
25. " " -YSB-24
26. " " -BSH-1
27. Br.Sarson -Pusa
28. " " -Kalyani
29. Taramira -T-27
30. Eruca sativa-T-27
31. " " -JR-1

KENYA

1. Linnot

MEXICO

1. SEL-W

NEPAL

1. Sarson, S-4
2. " S-5

3. Toria, Sarlahi Local
4. " , Sindhuli Local
5. " , Bhairhawa Local
6. " ,
7. " , Chilawon Local
8. " , Nijgadh Local
9. " , Navalparasil Local
10. " , Tarahara Local
11. " , Nepal Ganj Local

CHINA

1. Wulumugi (Yellow Rape)
2. Qing You-11
3. Gan You 5
4. 23
5. Bai Cheng (Yellow)
6. Hu You 9
7. Qing You 9
8. Sheng Li Qing Geng

SWEDEN

1. Consul
2. Hanna
3. Emma
4. Tornado
5. Puma-SV-86-27102
6. Sonja-86-37702
7. Topas No. 6050
8. Global No. 4061

TRAINING

The training needs of the Network members are many and varied, ranging from short course training for technicians and scientists at various levels to graduate training. IDRC's Fellowships and Awards Division assists the network to arrange appropriate short-course and degree trainings within member countries and in Canada, according to resources available. So far, short-term training courses supported by IDRC and organized by the Network- were held as follows:

1. Sesame and Saflower, held at the Directorate of Oil seeds Research, ICAR, Rajendranagar, Hyderabad, India, February 1987.
2. Rapeseed Methodology in Agronomy and Breeding Rapeseed-Mustard, held at G.B. Pant University of Agriculture and Technology, Pantnagar, India, December 1989.
3. Brassica Quality Training, held in the previous two days (21-22) at the Shanghai Academy of Agricultural Sciences.

Training opportunities are available for more Brassica, Sunflower, and Sesame courses.

SUMMARY OF NETWORK DEVELOPMENT IN CHRONOLOGICAL ORDER

- 1981 * India - Mustard Project,
 * " - Rapeseed Project,
 * " - Sesame Project,
 * " - Safflower Project,
 * Malawi - Groundnut Project (ICRISAT)
 * Ethiopia - Highland Oilcrops Project (Nigerseed, Ethiopian
 mustard, Rapeseed, Linseed, Sunflower)
 * - Oilcrops Network Project started with Dr. Ken Riley, IDRC Network
 Advisor based in Ethiopia.
- 1982 * Ethiopia - Lowland Oilseeds Project (Sesame, Groundnut,
 Safflower)
 * Sri Lanka - Oilseed Project (Sesame, Soybeans, Sunflower,
 Brassicas)
 * Egypt - Oilseed Project (Groundnut,, Sesame, Rapeseed,
 Sunflower)
 * China/Canada - Project (Brassicas)
 * Mozambique - Project (Groundnut)
- 1983 * Sudan - Oilseed Project (Goundnuts, Sesame, Soybeans,
 Sunflower)
 * Tanzania - Project (Pulses and Groundnut)
 **Egypt - 1st Network Workshop
- 1984 * - Dr. A.Omran replaced Dr. Riley as Network Advisor.
- **Italy - FAO Sesame Consultation Meeting
 **Malawi - ICRISAT 1st Groundnut Regional Workshop of
 Southern Africa
 * Network/Canada - Anther Culture Project (Sesame, Nigerseed)
 **India - 2nd Network Workshop (Sesame and Safflower)
 **Argentina - 11th Sunflower Conference
- 1985 * Ethiopia - 3rd Network Workshop (Niger and Brassicas).
 Decision was taken to form sub-networks.
 **USA - American Peasant Research Society
 **Zimbabwe - ICRISAT 2nd Groundnut Regional Workshop of
 Southern Africa
 * Pakistan - Project on rapeseed/sunflower for reclaimed lands
 * " - Project on Soybean
- 1986 **Sweden - Brassica Sub-Network formed
 **Poland - 7th Rapeseed Congress
 **Austria - FAO Sesame Project Formulation
 **India - Sesame and Safflower Training Course
 * " - Project on Sesame Scholars
 * " - Project on Sesame Onfarm Research
 * Ethiopia - Project on general Oilcrops
 * Nepal - Project on Oilseeds
- 1987 **Kenya - 4th Network Workshop (Sesame, Sunflower,
 Linseed). Sesame and Sunflower Subnetworks
 formed.
 * " - Project (Vegetable Oil and Protein Systems).
 * India/Canada - Project (Brassicas)
 **Malawi - ICRISAT 3rd Groundnut Regional Workshop of
 Southern Africa
 **Yugoslavia - 12th Sunflower Conference
 * Philippines - Project on Rice-based Sesame

*New Project or New Phase.

**Meeting, Conference, Workshop, Training..

- 1989 **India - 2nd Brassica Sub-network Workshop
 ** " - International Safflower Conference
 ** " - Other Oil Crops Sub-network (Safflower,
 Nigerseed, Linseed) formed
 ** " - 1st Network Steering Committee Meeting (Network
 constitution drafted)
 **Turkey - FAO Sunflower Network meeting
 **Egypt - 2nd Sesame Sub-network Workshop
 ** " - 2nd Sunflower Sub-network Workshop
 **India - Brassica Production Training Course
- 1990 **Sudan - FAO/UNDP Project Formulation for Sudan, Somalia
 and the two Yemens
 **China - International Rapeseed Symposium
 ** " - 3rd Brassica Sub-network Workshop
 **Tanzania - ICRISAT 4th Groundnut Regional Workshop
 * Kenya - Sesame Project

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