Directory of World Faba Bean Research Faba Bean Information Service



THE INTERNATIONAL CENTER FOR AGRICULTURAL RESEARCH IN THE DRY AREAS (ICARDA)

Dec. 1981

The Faba Bean Information Service (FABIS) is provided by the International Center for Agricultural Research in 'the Dry Areas (ICARDA). This Directory appears in ICARDA's Scientific Newsletter publication series. For details of other ICARDA publications, please write to:

Training and Communications Program, ICARDA, P.O. Box 5466, Aleppo, Syria

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Preface

The 'Directory of World Faba Bean Research' appears as part of the Faba Bean Information Service (FABIS). This service is provided by ICARDA for Faba Bean researchers throughout the world as part of the Center's international responsibility for the development and improvement of the crop.

This Directory has been compiled from the information sent to us by members of the FABIS mailing list in response to a questionnaire circulated in October, 1980. There are many faba bean researchers for whom we have no up-to-date information. We will be pleased to receive additional information at any time, particularly on present or future research interests.

We hope to publish revisions of this Directory at intervals in the future.

It is difficult to avoid errors in a listing of this kind. We would be grateful if you could inform us of any errors you find in this Directory, so that the necessary corrections can be made in future editions.

We wish to acknowledge with thanks the support of IDRC to the FABIS service.

Acknowledgement is made for the patient work of Jouhayna Issa (compiler) and Sylva Cholakian (typist) in the production of this directory.

This 'Directory of World Faba Bean Research' is a listing of the Names, Institution Addresses, Qualification/Position, and Research Interests of all the faba bean researchers for whom we have recent information.

This information is organised as follows:

Region of the World - Near East and North Africa
Far East and Australasia
The Americas
Europe

alphabetical order of Country within each region alphabetical order of Town within each country alphabetical order of Institution within each town alphabetical order of Surname of researcher at each institution

In addition, there is a Surname Index at the end of the Directory.

FABIS, Training and Communications Program, ICARDA, P.O. Box 5466, Aleppo, SYRIA

The map on the cover gives an indication of the centers of faba bean research

1 - 5 faba bean researchers (per country)

6 - 10 faba bean researchers

11 - 25 faba bean researchers

26 - 50 faba bean researchers

more than 50 faba bean researchers

These numbers are based on the researchers listed in this Directory, and do not necessarily represent the exact numbers of researchers in each country.

INSTITUTE AND ADDRESS	NAME	QUALIFICATION & POSITION	
NEAR EAST AND AFRICA			
AFGHANISTAN Ministry of Agriculture, Agricultural Research Dept Kabul ALGERIA	Atequilah AIAR "Ghulam HAIDAR		
IDGC, BP 16, El-Harrash Experimental Station, Ain El-Hajjar, Algiers			E: ni pi pi be
	Ould S. HOCINE	Engineer Agronomist Head, Grain Legume Program	I
	L. HACHEMI		
·	Lamari LAKHDAR	M. Sc. Plant Breeder.	
	Noureddine BOUATTOURA	Ph. D. Plant Breeder.	
Station Experimentale,	Said BOCHERIKA		
BP 59, Sidi Bel Abbess, Algiers	Walid KHAYRALLAH		
28 Rue Maouchi Ahmed, Amizour, (Bejaia)	Ahmed MENDILI		
Khroub Agricultural Res. Station, <u>Constantine</u>	Ali MAATALLAH		
6 Rue "J" Fabourg de la Gare Bordj-Bou-Arreridj W. De <u>Setif</u>	Tibourtine ABDELHANID		
D.D.A., Daraw de Setif, Boulevard les Novembre, Setif	Nait D. TOUPIK		
D.D.A.R.A.F., De la Wilaya de Setif, Setif	Kara LARBI		
Inspection de la Protec- tion des Vegetaux, Cite des 1000 Cocenents, Setif	Diafet KANEL '		
BANGLADESH			
Bangladesh Agric. Research Institute, 87, Pioneer Ros Kakrail Dacca-2		Ph. D. Director	

Kakrail, Dacca-2

Effect of plant density on yield for local cultivars; relationship between sowing date, number of pods per plant and number of seeds per pod; effect of row spacing on disease and pest development; fertilizer trials on faba bean.

RESEARCH INTERESTS

Improvement of faba bean.

Bangladesh Agric. Research Inst., Agronomy Division, Joydebpur, P.O.Chandana <u>Dacca</u>	A. F. MANIRUZZAMAN	Ph. D. Principal Scientific Officer.	Fut.Local types of faba bean will be collected, then evaluated along with the introduced faba bean lines for their production poten- tial and suitability for the cropping systems
Bangladesh Agricultural Research Inst. (BARI), Pulses & Oil Seed Division Sher-E. Banglangar, Dacca 15	Ahmed NASIRUDDIN		
Bangladesh Agricultural University, Dept. of Gene- tics and Plant Breeding, Mymensingh		Ph. D. Assistant Professor	examination of some genetical and physio- logical aspects of yield. Fut.Utilization of the genetic basis for se- lection of improved and adapted geno- types.
Institute of Nuclear Agriculture, P.O.Box 4, Mymensingh	Anwarul Q. SHAIKH	Ph. D. Principal Scientific Officer. Head, Plant Genetic Division.	 Fut.1. Breeding large numbers of germplasm of faba bean from different countries. 2. Adaptation trials. 3. Desirable types from segregating populations.
CAMEROUN BP 138	E. WESTPHAL	Ph. D.	
Yaounde	S. WESTFIAN	ru. D.	
CYPRUS			
Agricultural Research Institute, Ministry of Agricultural and Natural Resources <u>Nicosia</u>	George ALEXANDRU		Breeding
Agricultural Research Institute, <u>Nicosia</u>	Athena DELLA	M. Sc. A.A.R.O. Agronomy	Collection of local varieties of <i>Vicia faba</i> . Fut.Evaluation of collected lines and improvement of local varieties of <i>Vicia faba</i> .
	Andreas HADJICHRISTODOU-LOU.	Ph. D.	Legume, cereal agronomy.
<u>EGYPT</u>			
Alexandria University Faculty of Agriculture Alexandria	Ahmed A. ADBEL BARY	Ph. D. Professor of Agronomy	 Determination of optimal cultural practices for faba bean production in Northern Egypt. Effect of minor elements on yield and quality of faba bean. Genetical studies on main faba bean properties. Fut.1. Protein improvement in faba bean. Isolation of faba lines tolerant to soil salts. Disease resistance in faba bean.
	Hatim RL-ATTAR	Professor of Soils	

INSTITUTE AND A	DDRESS	NAME	QUALIFICATION & POSITION	RESEARCH INTERESTS
		Mostafa S. MOHAMED	Ph. D. Professor	 Protein quality and digestibility studies. Antitrypsin in faba bean. Haemagglutinins in faba beans. Put.1. Phenolics in faba beans, Hard seed in faba bean.
		Abmed S. MESALLAM	Ph. D. Lecturer	Faba bean projects.
		Samir A. SALEM	-Ph. D. Associate Professor	1. Breeding studies:- a) Study of the variability and co-variability of the local and introduced cultivars, with respect to yielding ability and other important characters as related to the genotype, phenotype and environment. b) Genetic studies and quantitative inheritance of different characters in Vicia faba. 2. Cultural practice studies: conducting research on all aspects of faba bean production, plant population, spacing and fertilization, planting date trials, testing cultivars, seed rate, suitable harvest date and foliar spray of trace elements. Fut. The promising cultivars utilised to incorporate a character or a group of characters through crossing techniques from the introduced germplasm into the local adapted cultivars.
Alexandria Univ Faculty of Agri Dept. of Agric. El-Chatby, Alexandria	• . • .	A. Fl-Tabey SHEHATA	Ph. D. Professor	Analysis of cooking properties of faba beans. 1. Definition of the cooking properties and establishment of objective methods for their determination. 2. Study of the relationship between cooking qualities and agronomic factors. 3. Evaluation of the physical and chemical characteristics of the seeds as related to cooking properties.
Alexandria Univ. Faculty of Agric Dept. of Agrono Breeding.	culture,			1. Breeding for quality trials 2. Study of growth of Vicia faba on newly reclaimed lands in the north western Mediterranean coastal zone in Egypt.
Alexandria		Ali M. ABDEL-MONEIM	Ph. D. Lecturer	1. Gene bank collections. 2. Evaluation of faba bean collection. 3. Self and crop fertility. 4. Chemical analysis 5. Breeding 6. Analysis of yield and its components. Fut.1. The effect of micro-elements on yield and its components. 2. Flower shedding and its cure.

	Samir A. ABOU-DONIA	Ph. D. Asst. Professor in Dairy Science & Technology.	
	Found KHADR	Ph. D. Breeder.	Plant breeding.
Alexandria University,			Evaluation of some world collection of Vicia faba.
Faculty of Agriculture, Dept. of Crop Science, Alexandria	Mohamed H. EL-SHEIKH.	B. Sc. Demonstrator	 Rffect of trace elements on yield and yield components. Rffect of planting methods, planting rate and sowing date, on yield and its components. Fut.Breeding of faba bean.
Alexandria University Faculty of Agriculture, Dept. of Food Science, Alexandria	Ahmed E. EL-MAHDY	Ph. D. Associate Professor	 Evaluation of faba bean as a source of protein and the effect of processing thereon. Nitrogen solubility of faba bean protein as affected by various Egyptian cooking methods. In-vitro digestibility of Vicia faba proteins as affected by methods of cooking. Trypsin inhibitor activity of faba beans. Haemagglutinin activity of faba beans. Evaluation of 15 different varieties collected from different countries and cultivated in Egypt for their antinutritional factors, namely: phenols, trypsin inhibitor and haemagglutinins. Changes in phenolic substances during storing and heat processing of faba bean. Changes in pectic substances during storing, germination and heat processing of faba beans.
	Mouhammed EL-TABYI	Professor Head, Food Technical Department.	
Assiut University, Faculty of Agriculture,	Farouk H. ABDALLA	Ph. D. Chairman, Agronomy Dept.	
Agronomy Department, Assiut	Mourid N. ABDALLAB	Ph. D.	The effect of some cultural practices and plant growth hormones on field beans under Assult conditions.
	E. M. SHALABY		
Ain Shams University, Faculty of Agriculture, Department of Genetics,			Development of cultivars which are characte- rised by high protein content and resistance to shedding and diseases.
Cairo	Sayed H. HASSANIEN	Ph. D. Professor, Head of the Dept. of Genetics.	Improvement of protein content and quality of the Egyptian varieties. Fut.Same as above, also shedding and disease resistance.
Ain Shams University, Agronomy Department, Cairo	Moustafa MURSI .	Ph. D. Professor, Head of Agronomy Department.	

INSTITUTE AND ADDRESS	NAME	QUALIFICATION & POSITION	RESEARCH INTERESTS
Atomic Energy Establish., Radiobiology Department, Genetics Unit, Cairo	A. T ABO-HEGAZI	Professor Head of Plant Breeding and Genetic Unit	Improving <i>Vicia faba</i> through radiation-in-duced mutations (high protein mutants, pest resistance. etc.)
Bahteem Agricultural Research station, Bahteem, Cairo	Ali M. EL-BAYOUMI		Fut.Breeding and agronomy of faba beans.
International Development Research Centre (IDRC), P.O.Box 2685, Horrieh, Heliopolis, Cairo	Fawzi M. KISHK	Ph. D. Program Officer.	Development and management research.
National Research Centre, Agricultural Division, Dokki, <u>Cairo</u>	M. Talaat EL-SAIDI	Professor Head of Agric. Division	Salinity, water stress, water excess on crop plants. Fut.l. Salinity, water stress, water excess on Vicia faba. 2. Chemical & biological evaluation of faba bean. 3. Nutrition value.
	Gamal N. GABERIEL	Professor	
National Research Centre, Botany Laboratory, Dokki, <u>Cairo</u>	Hegazi A TALAAT	Professor Head of Botany Laboratory	
National Research Centre, Soils & Water Use Lab., Dokki, Cairo	Mohammed SABER	Professor Soil Microbiologist	 Microbiology Inoculation with phosphate dissolving bacteria Rhizobium. Fut. Same as above.
Agric. Research Centre Central Laboratory for Design and Statistical Analysis Research, Giza	Hosni A. EL-FOTOUH	Ph. D.	Experimental design.
Agric. Research Centre,			1. Development of agronomic practices.
Field Crops Institute, Food Legume Section,	131 133-		2. Study of farm level yield constraints.
<u> Giza</u>	Ali ABDEL-AZIZ	Ph. D.	
	Said A. EID	Ph. D.	Virology of faba bean.
	Aziz H. FAHMI	Ph. D.	Cooking and putnishing muslim of the t
	Farrag H. FARAG	•	Cooking and nutritive quality of faba bean. Weed control in faba bean.
	Helmi M. FARAG	B. Sc.	Breeding and agronomy of faba bean food
	Ali A. IBRAHIM	DL D	legume crops.
	···· A. IDIMILI	Ph. D. Head of Institute.	Breeding and Agronomy.

	Shaaban A. KHALIL	Pn. D. Researcher, Plant Breede ÷		 Development of high yielding varieties and those resistant to diseases and pests through different breeding programs. Improving agricultural practices of the cultivated varieties of faba bean. Genetic studies, evaluation of breeding materials and agronomic studies of faba bean.
	Abdullah M. NASSIB	M. S. Research Agronomis Head, Food Legume Research Section.	t	Breeding and agronomy of fama beam.
	M. SHERBEENI	Ph. D. Agronomist		
	Mohamed A. TOLBA	Ph. D.		
	M. K. ZAHRAN	Ph. D.		
Agricultural Research Centre, Plant Pathology Department Giza	Mostafa EMBABI	Ph. D. Chief Research Nematolo- gist.		Study of the effect of certain nematicides on the growth and nodulation of faba bean. Investigating the interaction between nematodes and Rhizobium leguminosarum on faba bean.
	Hosni A. MÕHAMED	Professor Principal Investigator.	Fut	Plant pathology, and all aspects of plant pathological studies on all crops grown in Egypt. Disease of field crops, onion, garlic and oil crops.
Agric. Research Centre, Plant Pathology Inst., Division of Legume Disease Giza	es,			 Study of the faba bean diseases, their casual pathogens and factors affecting disease severity. Co-operation with breeders for production of disease resistant lines. Testing fungicides. Study of effect of agricultural practices on disease incidence.
	Nagi M. ABOUZEID	Ph. D. Pathologist		Studies on leaf spots, rust and downy mildew of faba bean. Evaluation of breeding material and testing fungicides.
Agric. Research Centre, Inst. of Plant Pathology, Virus Research Dept., Giza	Abd El-Wahab <u>E</u> L-AMRETY	Ph. D. Plant Virologist	Fut	1. Symptomatology, host range and effect on yield of seed-transmitted virus isolated from faba bean in Egypt. 2. Biochemical studies between resistant and susceptible faba bean infected with bean yellow mosaic virus. 1. Isolation and identification of some viruses affecting faba bean in Egypt. 2. Studies of properties of some viruses (e.g. pea leaf roll virus) affecting faba bean in Egypt.

INSTITUTE AND ADDRESS	NAME	QUALIFICATION & POSITION	RESEARCH INTERESTS
Agricultural Research Centre,	Soliman E. HASSAN	M. Sc.	Pests of faba bean.
Plant Protection Research Institute, Giza	Soriam B. Masony	Assistant Lecturer	Study of the susceptibility of different varieties to Bruchid infestation and the different factors affecting it in the field or in storage. Fut.Study of the different methods of control to protect Vicia faba and other legume crops. The study of the ecological and biological aspects of Vicia faba pests.
Agric. Research Centre, Plant Protection Research Institute, Stored Products Pests Research, Dokki Giza	Soliman S. AHMED		
Agric. Research Centre, Plant Protection Inst., Weed Control Res. Sec., Giza	Tawfik I. IBRAHIM	Head of Weed Control Research Section.	 Seeking reliable herbicidal application for Orobanche and weed control recommendations. Screening herbicides against Orobanche. Studying the use of synthetic germination as a cheaper chemical method to control Orobanche. Fut.1. Screening tests for new herbicides at Sakha Agric. Res. Station, Kafr-El-Sheikh. To study the effect of certain synthetic germination stimulants on broomrape. To study the reaction between herbicides and varieties of faba bean in the respect of varietal tolerance to parasitism.
Agricultural Research Centre, Plant & Water Research Institute, <u>Giza</u>	M. S. KHADR	Ph. D. Associate Professor	Manuring researches, application of NPK and micronutrients.
Agricultural Research Centre,			Investigation of nematode problems in faba bean and their control.
Phytopathological Res. Institute,	Salah A. EL-ERAKI	Ph. D.	
Giza	Samia I. MASSOUD	Ph. D.	
	Galal S. SHEHLA	Ph. D.	
Agric. Res. Centre, Seed Technology Section, <u>Giza</u>	Hassan F. HASSAN		Fut.1. Inheritance of amino acid in <i>Vicia faba</i> . 2. <i>Orobanche</i> resistance.
Agric. Res. Centre, Soil and Water Research	M. A. FOUDA	Ph. D. Head of Microbiology Dept	
Inst., Agric. Microbiology Department, <u>Giza</u>	Youssef HAMDI	Ph. D.	

Agric. Res. Center, Soil and Water Research Inst., Plant Nutrition Section,	M. R. HAMISSA	Ph. D. Researcher	Plant nutrition.
Giza Cairo University, Faculty of Agriculture, Agronomy Department, Giza	Mazhar F. ABDALLAH	Ph. D. Associate Professor	Improvement of field bean. Fut.1. Extensive studies on local stocks. 2. Breeding for tolerance to Orobanche.
Sakha Agric. Research Station, Kafr El-Sheikh	Mouhamed HASSAN		
Tant University, Faculty of Agriculture, Agronomy Department, Kafr El-Sheikh			Study of use of growth regulators for flower induction, seed setting in faba bean fortilization, and yield performance of faba bean varieties.
	Abdel Aziz G. ABDELHA- FEZ	Ph. D. Assistant Professor	 Breeding for Botrytisresistance of faba beans grown in Northern Egypt. Studies on the interaction between nodulation, salinity and yielding capacity. Fut.Study of chances of breeding faba beans with better quality e.g. less tannins and nutrient inhibitors.
Tant University, Faculty of Agriculture, Agronomy Department, Kafr El-Sheikh	Mohamed S. EL-KEREDY	Professor	Breeding and genetics of Vicia faba. Fut.Environmental problems, also mutation breeding research.
Faculty of Agriculture, Mouchtuber, <u>Kilobye</u>	Hussein RUSHDI	Assistant Professor	
Menoufia University, College of Agriculture, Shebin El-Kom ETHIOPIA	M. S. RODY	Ph. D.	
Institute of Agric. Res., P.O.Box 2003, Adis Ababa	Asfaw TELAYE	M. Sc. Research Officer	 Flowering in young fruit, abscission review (literature). Frost tolerance study. Flower in young fruit abscission. Crossing for various desirable characters. Fut. Agronomy and breeding aspects for crop improvement in Ethiopia.
Agric. Experimental Sta., Addis Ababa University, P.O.Box 32, Debre Zeit	Geletu BEJIA	M. Sc. Lecturer	Research on highland pulses: horse bean, field bean, chickpea, and lentil. Also research work in collaboration with other faba bean researchers. Fut. The same research will be developed by team members of the Highland Pulse Researchers every year.
	Taye BEZUNEH	Ph. D.	

INSTITUTE AND ADDRESS	NAME	QUALIFICATION & POSITION	RESEARCH INTERESTS
INDIA			
Dept. of Microbiology, Bose Institute, 93/1, Acharya-700 009, Calcutta	A. K. MISHRA	Professor	
Agricultural Research Institute, <u>Gwalior</u> -474002 (M.P.)	A. S. TIWARI	Professor of Plant Bre- eding.	Fut.Grain legumes and oilseed crops research and development in northern Madhya Pradesh.
Training Čentre, Seetharampet, <u>Hyderabad</u> , 500001	O. SREEMANNARAYANA	Ph. D. Assistant Director	
National Seeds Crop Ltd., "Beej Bhawan" (C.T.O. Buil- dings), Pura Complex, New Delhi, 110012	D. G. GUPTA	Regional Manager	Seed production of national varieties of temperature and sub-tropical crops.
Indian Agricultural Res. Institute, <u>New Delhi</u> , 10012	.H. K. JAIN	Ph. D. Director	•
I.A.R.I., New Delhi 118012	B. SHARMA	Ph. D Geneticist	
Water Technology Centre, Indian Agric. Res. Inst., New Delhi 110012	S. K. SINHA	Ph. D.	
Indian Council of Agric. Research, <u>New Delhi</u> 110001	O. P. GAUTAM	Ph. D.	
IARI Regional Station, Kalyanpur, <u>Kanpur</u> 208024	S. CHANDRA	Ph. D. Project Director Pulses	
Punjab Agric. University, Dept. of Plant Breeding, Ludhiana 141004	K. K. DHINGRA	Ph. D. Agronomist	
G. B. Pant University of Agriculture and Technolo- gy, Dept. of Agronomy, Pantnagar 263145	Ram K. PANDEY	Ph. D. Associate Professor	 Agronomic studies such as date of planting and seeding rates, nutrients and water requirement. Evaluation of faba bean in different cropping systems. Studies on growth pattern, dry matter production and partitioning efficiency, photoperiodic response, flower abortion, pod setting and drought resistance. Fut. Physiological studies such as photosynthesis, partitioning of assimilates, photoperiodic and temperature effects of flowering, drought resistance, flower abortion, setting and plant modelling.

G. B. Pant University of Agric. and Technology, Pantnagar 263145	N. P. SINGH	Ph. D. Associate Professor of Agronomy.	
G. B. Pant University of Agric. and Technology, Dept. of Plant Pathology, Pantnagar 263145	S. P. BENIWAL	Ph. D. Plant Pathologist	
ICRISAT Patancheru Andhra Pradesh, 502324	L. J. VAN DER MAESEN	Ph. D. Principal Germplasm Botanist	 Botanical and genetic resource aspects. Collection of germplasm along with other pulses.
	Y. L. NENE	Ph. D.	Leading the Pulse Improvement Program.
IRAN			
Ministry of Agriculture and Natural Resources, Seed and Plant Improvement Institute, Karaj	M. A. VAHABIAN	Ph. D. Director	
Seed and Plant Improvement	P. PARVENEH	Ph. D.	
Institute, Plant Genetic Resources Division, Karaj	B. SADRI		
University of Tehran, College of Agriculture Karaj	Amir SHAHI	Ph. D.	
P.O.Box 209 <u>Karaj</u>	A. SARAFI	Ph. D. Associate Professor	
University of Azarbadgan College of Agriculture, Dept. of Crop Science, Tabriz	Farrokh R. KHOYI Firouz NADERI	Ph. D. Associate Professor Head of Department	Fut.Possibly yield trials of faba beans.
TDAG		-	
IRAQ Project Administration, Greater Mussayab, Bable	K. A. AJAM		
Abu Ghraib Experiment Station, Administration of Plant Protection, Baghdad	H. S. EL-HAIDARI	Ph. D.	Studies on diseases of faba bean in Iraq.
Agric. & Water Resources Research Centre, Scientific Research Coun- cil, P.O.Box 110094, Jadiriya, Baghdad	Ghazi M. AL-KAWAZ	Assistant Professor. Head of Water Consump- tive Ose Unit.	Dealing with different crops to determine their consumptive use of water during the growing season.
Agric. and Water Resources Research Centre, Soil Microbiology Unit, P.O.Box 10094, Jadiriya, Baghdad	А. І. УАНУА	Ph. D.	

INSTITUTE AND ADDRESS	NAME	_ QUALIFICATION & POSITION	RESEARCH INTERESTS
General Body for Applied Agric. Research, Abu-Ghraib, Baghdad	Mohsin E. FOLEH		Breeding, agronomy, fertilization and Rhizobium inoculation studies. 1. Development of improved faba bean cultivars and technology for dry seed use. 2. Agronomy trials, include studies on dates, rates and methods of planting. Fut.1. Germplasm collection. 2. Evaluation and selection. 3. Development of drought tolerance in faba bean. 4. Studies on protein content of faba bean cultivars.
	Mohammad MAYOUF	Ph. D. Leader of Food Legume Division	As for M. E. Foleh.
Institute for Applied Reson Natural Resources, Foundation of Scientific Research, Baghdad		Ph. D. Student	Effect of salt stress on nitrogen fixation in Vicia faba. Fut.1. Studies on the efficiency of N2 fixation by local Vicia faba rhizobia in different Iraqi soils. 2. The influence of salination and reclamation processes on the survival and effective ness of Vicia faba rhizobia. 3. Studies on the influence of inoculation on the yield of Vicia faba and nitrogen content of soil by using local and imported inocula.
Institute of Agric. Tech., Abu-Ghraib, Baghdad	Y. SINGH	Ph. D.	
Applied Agric. Research Centre, College of Agric. & Forestry, Hammam El-Alil Mosul	A. EL-FAKHRY	Ph. D.	
Mosul University, College of Agric. and Forestry, Field Crops Department, Hammam El-Alil Mosul	Jalal S. ALI	Professor	 Varietal trials for certain faba bean cultivars under the prevailing environmental conditions in Northern Iraq. The effect of supplementary irrigation and phosphate fertilization on the crop yield. The quantitative relationships between plant population and crop yield. Technological and chemical studies on certain faba bean cultivars. Fut. To develop this research after obtaining the results of present experiments.
Agricultural Research Station, <u>Nainawa</u> Province	Yousif M. FATTAH	B. Sc.	Large seed yield variety selections, and tolerance of faba bean in the area.

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JORDAN Ministry of Agriculture,	Z. GHOSHEH		
Dept. of Agric. Research and Extension,	N. KATHKUDA Mohammad M. OBEIDAT	M. Sc.	
P.O.Box 2178, <u>Amman</u>		Researcher	
	Jamil QUHAIWI	Ph. D.	
	Ahmed YAGHMOUR		
University of Jordan,	M. DUWAYRE		
Faculty of Agriculture, P.O.Box 13320,	Mohammed FAWAL	Ph. D.	Study of some agronomic problems i.e. plan-
Amma n	Nasri HADDAD	Assistant Professor	ting dates and plant population in the Jordan Valley under irrigation. Varietal trials and screening nurseries from ICARDA are being tested.
	Ma'an SHEQUERA		
University of Jordan, Faculty of Sciences, Amman	Subhi QASEM	Ph. D. Dean.	
Agricultural Research Sta. Karak	, Sitan RABDI		
Agricultural Research Sta. Shaubak	,Salem TAHAT		
KENYA		Dt. D	
P.O.Box 48197, Nairobi	Norman MYERS	Ph. D.	
LEBANON		Ph. D.	
American Univ. of Beirut, Faculty of Agricultural	Nasri S. KAWAR	Ph. D.	Virus diseases of faba bean: identification,
Sciences,	Khaled M. MAKKOUK	Senior Lecturer	epidemiology and yield losses due to infec-
Beirut			tion. Fut.Screening for faba bean lines tolerant to bean yellow mosaic virus.
	Adib T. SAAD	Ph. D.	
	Abdel Rahmen SAGHIR	Ph. D.	
	Salah Abu SHAKRA	Ph. D.	
	Mahmoud SOLH	Ph. D.	
	Raja TANNOUS	Ph. D.	
Agricultural Res. Station	, Adnan ALEMEDDIN	Ph. D.	
Tel Amara,	Joseph KLAIMI	Ph. D.	
Rayak	Mahmoud MUSTAFA		
	Mahmoud SHEHAB		

INSTITUTE AND ADDRESS	NAME	QUALIFICATION & POSITION	N RESEARCH INTERESTS
LIBYA			THE STANDOLD
Agric. Research Centre, c/o UNDP, P.O.Box 358, Tripoli	John M. ASHLEY	Ph. D. Head, Grain Legume Improvement Program	Screening of improved lines, also some agronomic trials; all work done in co-operative trials with ICARDA. Fut. Same as above, also screening of improved types for drought tolerance in regulated
Agric. Research Centre, P.O.Box 2480, Tripoli	Abubaker MADDUR Ali SHREDI		flow irrigation trials.
MAURITIUS Ministry of Agriculture, Agric. Division, Mauritius	M. BOODOO	Ph. D.	Crop production, agronomy.
MOROCCO Ecole Nationale d'Agric., B.P. 40, Meknes	Christian COTTET	Professor of Agronomy	 Characteristics of the production of food legumes in Morocco. The latest results of the agronomic research mainly on Vicia faba.
Direction Recherche Agronomique (DRA), B.P. 415, Rabat	D. DOTCHEV Mohamed KAMEL	Ph. D.	Sowing methods; Orobanche.
German Agency for Techni- cal Cooperation (GTZ), c/o Ambassade de la Repub- lique Federale d'Alle- magne, B.P. 235, Rabat	Ute SCHMITT	Ph. D. Phytopathologist	 Chemical control method with the herbicide glyphosate of Orobanche crenata (in faba beans, peas). Extension work for the above method. Survey work concerning infestation level,
I.N.A.V. Institute Agronomique et Veterinaire National, Hassan II, B.P. 704, Rabat	L. GALLAGHER	Ph. D.	distribution and importance of O. orenata.
.N.A.V. Hassan II, athology Department, i.P. 704, abat	Abmed AKAABOUNE		Survey of faba bean seeds and four other species to determine the quality of the seed actually used by local farmers. Fut. Several tests will be carried out in the lab and in the field on temperature of storage, moisture content, mechanical purity, percent of germination vigour, seed-born diseases,
.N.R.A. /o Casier ONLI, abat	Rob PIETERS	FAO Expert (pathologist)	genetic purity and yield. Resistance breeding in <i>Vicia faba</i> towards pests and diseases (mainly 0. crenata). Looking for horizontal resistance towards most of these pests and diseases.

B.P. 704 Agdal, Rabat	Francois PAPY	Ph. D.	Tillage and soil protection.
Phytopathology Department, B.P. 415, Rabat	K. SCHLUTER	Ph. D.	Plant protection, nematodes, entomology.
Societe de Gestion des Terres Agricoles, SOEGETA B.P. 731, Agdal Rabat NEPAL	Tabet ABDELLATIF	Agricultural Engineer	Seed production.
Agronomy Division, P.O.Box 404 G.P.O., Kathmandu	M. P. BHARATI	M. Sc. Agronomist Leader of Grain Legume Improvement Program.	Fut.1. Varietal improvement through introduction and selection of faba bean. 2. Agronomic research including rhizobium microbiology. 3. Cropping system studies.
Hill Agric. Development Project, c/o UNDP, P.O.Box 107, <u>Kathmandu</u>	P. WHITEMAN	Ph. D.	
Parwanipur Agric. Station, Birganj Marayani zone, Kathmandu	R. P.SAH	Ph. D.	
PAKISTAN	AAAA B IMIGODIN	Director	
Punjab Agric. Res. Inst., Faisalabad		Ph. D.	
	M. Iqbal KHAN	Pulses Botanist	
Univ. of Agriculture, <u>Faisalabad</u>	Aslam MUHAMMED	Professor Director of Advanced Studies.	Planting and sowing dates, tolerance to diseases. Put.Study of infection by Botrytis. The aim is to search for resistant genes and to see the extent of cross-pollination in Vicia faba under semi-arid conditions.
National Agric. Res. Cen., Pulses program, <u>Islamabad</u>	Bashir A. MALIK	Ph. D.	Tolerance to Ascochyta blight.
Cotton Research Institute P.O.Box 328, Multan QATAR	Sadek I. BISHARA	Ph. D. Cotton Entomologist, FAO-UNDP.	
P. O. Box 1967, Doha SAUDI ARABIA	Mohamed A. KHALIFA	Ph. D. FAO Agronomist	
Faculty of Agriculture, Dept. of Crop Production, Riyad University, Riyad	A. A. ABO HASSAN	Ph. D.	

INSTITUTE AND ADDRESS	NAME	QUALIFICATION & POSITION	RESEARCH INTERESTS
SUDAN Hudeiba Research Station, P.O.Box 31, Ed-Damer	Ibrhaim A. BABIKER	Ph. D. Director of Hudeiba Research Station.	Soil chemistry; nitrogenous fertilization.
,	El-Taher O. EL-BADAWI		Weed control.
	Hussein EL-HUSSEIN	Technician	Agronomy.
	Sami O. FREIGOUN	Ph. D. Assistant Professor	Diseases of faba beans.
	Gumaa S. GUMAA	Ph. D. Soil Physiologist	Soil physiology.
	Moustafa M. HUSSEIN	Ph. D. Plant Pathologist	Studies and observations on faba bean disea- ses mainly: mosaic, powdery mildew, wilt, root rot and leaf roll.
	Gaafar El-Sarag MOHAMED	Ph. D. Agronomist	Agronomic studies on faba bean which include: 1. Cultivars sowing date experiment. 2. Irrigation of faba bean in relation to different phases of plant development. 3. The response of faba bean to different weeding regimes. Fut.1. Hand preparation and sowing methods. 2. Plant population studies.
	Salih H. SALIH	Ph. D. Research Specialist	Study of the symbiotic variability in faba bean and the Rhizoblum bacteria, as well as the effect of some environmental factors on the symbiotic efficiency of this crop in an attempt to select for better nitrogen fixation. Fut.Plant breeding aspects of faba bean.
	м. в. тана	Ph. D. Plant Physiologist	 Studies on the effect of sowing date, plant population and plant distribution on the growth of faba bean. Studies on methods of land preparation and sowing. Fut. Studies on water relations of faba bean in relation to various methods of sowing and land preparation.
Food Research Centre, P.O.Box 213, Khartoum North	Abdalla B. ALI	Ph. D. Head of Food Rresenta- tion Dept.	Studies on the suitability of different cultivars for processing. Fut.1. Formulation of foods from <i>Vicia faba</i> . 2. Better utilization of <i>V. faba</i> in Sudan.
	Awad Y. ALI	Ph. D.	Nutrition.
Khartoum University, Faculty of Agriculture,	Ahmed BAGHDADI	Ph. D. Lecturer	Plant diseases.
Shambat, Khartoum	Abdin M. ZEIN EL-ABDIN	Ph. D Lecturer	Research on aspects of faba bean insect pest complex such as biology, ecology, host plant resistance and control. Special consideration is given to the mung moth, Maruca testulalis (Gey).

	Imman EL-KHIDER	Professor	Integrated biological control.
	Abdel M. EL-NADI	Ph. D.	Plant physiology.
	Hassan HABBISH	Professor	Microbiology
	Ahmed HASHIM	Ph. D. Lecturer	Virus diseases.
	Abdallah M. KAROURI	Ph. D. Assistant Professor.	Agronomy, physiology and nutrition of the plant.
	Sharif KHEIRY	Ph. D. Lecturer	Microbiology and Rhizobium bacteria.
	Ahmed A. MAHD;	Ph. D. Lecturer	Microbiology.
	El-Imam E. NOUR	Professor	Agricultural entomology
Shambat Research Station, P.O.Box 3O, Khartoum North			Evaluation of pesticides against major insects of faba bean. Evaluation of Neem (Azadirachta indica Ajuss) against store and field pests in faba beam. Use of organic additives in reclamation of soil, and the effect on faba beans. Also as outlined below.
	Farouk Λ. SALIH	Professor Food Legume Breeder	1. Studies on wilt complex of faba bean. 2. Breeding varieties of faba beans for new areas. 3. Co-operator of the ICARDA/IFAD Nile Valley project of faba beans at Shambat. Fut.Same as 1 and 2. Breeding objectives will be continued with the possibility of growing all the breeding material (genetic stocks) at Gezira Research farm.
	Siddiq A. SIDDIQ	Head of Shambat Research Station.	Survey of major insect pests of faba bean. Fut.Control of storage pests of faba bean.
Shendi Research Station, Shendi	Ali K. MOHAMED	Head of Shendi Station	Agronomic research.
Gezira Research Station, P.O.Box 126, Wad Medani	Osman A. AGEEB	Associate Professor Agronomist	Sowing date, water requirements, plant population, variety trials, and inoculation trials of faba bean. Fut.Same as above, but emphasis will be placed on introducing the crop into marginal agroclimatic regions to satisfy the growing needs of the population.
	Mahmoud A. ALI	Professor National Coordinator for Botany and Plant Patho- logy.	 Effect of sowing dates, spacing and No. of plants/hole on the control of powdery mildew. Effect of NPK fertilizer on incidence of powdery mildew. Effect of sowing dated and watering on incidence of wilt and root rot. Screening of chemicals for control of powdery mildew. Fut. Disease survey.

INSTITUTE AND ADDRESS	NAME	QUALIFICATION & POSITION	RESEARCH INTERESTS
	Osman A. FADL	Professor Head of Soil Science Section	Investigations of actual ET of faba beans with the aim of quantifying watering of the crop and determining crop factors (ET/E) for predication of water requirement. Fut. Verification of the above data under tenant conditions in the Gezira.
	Saeed M. FARAH	Ph. D. Senior Research Scien- tist	Water relations of faba beans.
	Mahmoud S. HASSAN	Professor National Coordinator for Horticultural Research.	Investigation on varieties
Agric. Research Coopera- tion, Soil Science Sec. Wad Medani	Musa A. Musa	Professor Deputy Director General	 Faba bean Rhizobia in irrigated clay soils. Strain selection and testing on various varieties on faba bean. Inoculant preparation and evaluation. Assaying the amount and contribution of fixed N to the prevailing cropping system. Interaction of faba bean Rhizobia and agric. chemicals.
SYRIA			
Aleppo University, Faculty of Agriculture, Aleppo	Bassam BAYA'A	Ph. D. Phytopathologist, Head of Plant Protection Department.	Survey of fungal faba bean diseases in Syria with special interest to that caused by Cercospora sonata.
	Ghazi HARIRI	Professor Vice President	 Screening of faba bean cultivars resistant to Aphis spp. Determination of Bruchus spp. damage to faba bean seeds. Sitona spp. infestation of faba bean seedlings with a special reference to Sitona limosus, use of biological and chemical control. Surveying and chemical control of insects associated with faba bean plant. Determination of damage by stem-borer (Lixus sp.) infesting faba bean in the coastal region. Identify alternative pollinating insects on faba bean other than honey bees.
	Kasser MASOUD	Ph. D. Lecturer	
ICARDA Food Legume Improvement Program, P.O.Box 5466 Aleppo			Research on:- Breeding and breeding methodology. Pathology: Ascochyta blight, chocolate spot and rust. Entomology: aphids, nematodes and other insect pests (e.g. stem borer and thrips). Agronomy: for rainfed and irrigated situations Physiology: growth habit, flower drop, environmental stresses.

			Microbiology: nitrogen fixation. Nutrition: cooking quality, protein content and quality, anti-nutritional factors. Weed control: including Orobanche. Socio-economic aspects of faba bean production. Research and communication activities. Also: training of faba bean.
	Yawooz ADHAM	B. Sc. Research Associate	Genetic study for Ph. D. program related to out-crossing in faba bean and correlation with bees.
	Farouk EL-SAYED	Ph. D. Faþa bean Breeder.	As for Hawtin (below).
	Geoffrey C.HAWTIN	Ph. D. Deputy Director General for Outreach	Support of national program research on food legumes, including faba beans, through breeding (major objectives: large and small seed types for green and dry yield, drought resistance to Orobanche, chocolate spot and Ascochyta blight, detetminate habit). Fut. Breeding for aphid resistance, stem nematode resistance and nutritional factors.
Now Studying for a Ph. D. on Vicia faba at Manitoba	Mamdouh OMAR	M. Sc. Research Associate	
Univ. <u>Winnipeg</u> CANADA.	Mohan SAXENA	Ph. D. Agronomist. Food Legume Program Leader.	Agronomy and production physiology of envi- ronmental adaptation.
	Mouhamed K. SIDDIQUE	M. Sc. Research Associate	Various agronomic and physiological research work such as: date of planting, plant population, varietal trials, growth, plant ideotypes, and drought tolerance study. Fut. More emphasis will be given to soil-water balance, light relationships, and drought tolerance.
	Oreib TAHHAN	B. Sc. Research Assistant	 Screening of faba bean cultivars resistant to Aphis spp. Determination of Bruchus spp. infesting faba bean seeds. Infestation of faba bean seedlings with a special reference to Sitona limosus. Use of biological and chemical control. Surveying and chemical control of insects associated with faba bean plants.
			 Fut.1. Determination of damage by stem borer (Lixus sp.) infesting faba bean in the coastal region. 2. Alternative pollinating insects of faba bean other than honey bees.
ICARDA, Farming Systems Program, P.O.Box 5466, Aleppo	David NYGAARD	Ph. D. Economist, Farming Systems Program Leader.	

INSTITUTE AND ADDRESS	NAME	QUALIFICATION & POSITION	RESEARCH INTERESTS
Federal Biological Res. Centre for Agriculture and Forestry (BBA), Institute for Biological			Evaluation of faba bean pests in dry areas, faba bean/aphid interrelationships, side effects of pesticides on beneficial insects, integrated pest control.
Pest Control, Heinrichstr 243, D-6100 <u>Darmstadt</u>	Fred A. KLINGAUF	Professor Director	 Faba bean pests - geographical distribution and importance. Faba bean aphid pests interrelationship, host selection of aphids, effective stimuli, and resistance to aphids. Biological Control.
GTZ FB 131, P.O.Box 5180, D-6236 Eschborn	Rudolf BINSACK	Ph. D.	
Munich Technical University, Lehrstuhl für Pflanzenbau und Pflanzenzüchtung, D-8050	Gerhard FISCHBECK	Ph. D. Professor	Improvement of seed set from crosses between European and Mediterranean strains (in cooperation with MMF Abdalla, University of Cairo, Egypt).
Freising-Weihenstephan	Johanna HAUSER	Dipl. Ing. Agr.	Development of trisomic lines for gene loca- lisation. Also as for G.Fischbeck above.
Tropen Institut Schottstr., 2, D-63 <u>Giessen</u>	Jochen ALKAMPER	Ph. D. Professor of Tropical Fu Agronomy.	Development of Ofobanche on Vicia faba. t.Nutrient uptake by Orobanche, competition for nutrients, starch and water.
Göttingen Universität, Institut für Pflanzenbau und Pflanzenzuctung, von Siebold Str., 8, D-3400 <u>Göttingen</u>			Development of new ideotype with higher grain weight, earliness, 'topless' and winter types; selection for improved root characteristics; breeding towards synthetic varieties after selection of inbred lines. Also, quality breeding to improve such triats as protein content, methionine per protein, tannin content and crude fibre content.
	Martin FRAUEN	Dipl. Ing. Agr. Scientific Assistant	Gonetie studies and breeding work. The main breeding aims are: yield, yield stability and earliness. A screening and selection program for quality characters of the seeds is being carried out to improve the nutritional quality.
	G. ROBBELEN	Professor	
Inst. Für Pflanzenschutz	G. CRUGER	Ph. D.	
im Gemusebau, Biologische Bundesanstalt für Land und Forstwirtschaft, Marktweg 60, 5030 <u>Hürth-Fischenich</u>	Peter MATTUSCH	Ph. D. Phytopathologist	Soilborne diseases.
Pflanzenz cht Oberlimpürg, D 7170 Schwaebisch Hall, <u>Oberlimpurg</u>	Werner H. BAIER	Ph. D. Plant Breeder	Practical plant breeding.

TUNISIA			Development of modification and assessment RPG/Promo in
Recherche Agronomique de Tunisie (INRAT).	Howard E. GRIDLEY	Ph. D. Food Legume Breeder	Development of weeding and arronomy programs in Tunisia; assistance in other programs in West Africa.
Avenue de l'Independence, Ariana	H. MLAIKI		
I.N.A.T. 43 Avenue Charles Nicolle, <u>Tunis</u>	M. DJERBI	Ph. D.	
011100 000 001-0,	Bouzid AHMED	Agronomist	
Division Technique, 30 Rue Alain Savary, <u>Tunis</u>	Mohamad MOUAFFAK		
Division Technique, 23 Bis, Rue Al-Djazira, Tunis	Namissi AMOR		
TURKEY Agricultural Research	Sahin TUFAN		
Institute, P.K. 25, Adapazari			
Ankara University, Faculty of Agriculture, Plant Growth and Breeding Department, Ankara	Didar ESER	Professor	Research work on winter resistance of faba bean and also on lines resistant to frost down to -15°C in seedling stages. Also working on lentils, chickpeas, peas and cow peas, small grains and other cereals.
	Sezen SEHIRALI	Professor Lecturer and Researcher	
	TOSUN	Professor Director of Plant Gro- wing and Breeding Department.	Research on winter resistance of <i>Vicia faba</i> minor lines resistant to frost. Research on other pulses (lentil, chickpea, peas and cow peas) small grains and cereals.
Bolge Zirai Arastirma Enstitusu, P.K. 226, Yeni Mahalle	Yilmaz SARIFAKIOGLU	B. Sc.	
Ankara	Nadir IZGIN		
General Directorate of Agricultural Research, Food Legume Project, P.O.Box 226, Ankara	NEGIF 12GIN		
Ministry of Agriculture, Dept. of Agricultural Research, P.K. 226, Ankara	Ayhan ANLEPLIOGLU	Ph. D. Director Ceneral.	
Mediterranean Agricultural Research Institute, P.K. 39, Antalya	Attila ALTUNAY	Ph. D. Multiple Cropping Pro- ject Coordinator. Fu	Selecting winter type of grain pod (green fruit) varieties. t.l. Releasing varieties. 2. Plant population density.
			3. Variety and sowing date trials.

INSTITUTE AND ADDRESS	NAME	QUALIFICATION & POSITION	RESEARCH INTERESTS
Bolge Zirai Arastirma Enstitusu Mudurlugu, P.K. 72, Diyarbakir	Ahmed O. ATTILA Mustafa KAYA	Ph. D.	
Agricultural Research Institute, P.K. 17, Eskisehir	Muzaffar ISIK		
Aegean Regional Agri.	Nevin ACIKGOZ		
Research Institute, P.K. 9, Menemen,	Ayse AKDEMIR	Ph. D.	
Izm <u>ir</u>	Y. Z. KUTLU	Ph. D.	
	Kasif TEMIZ	Ph. D. Director	
	Mehmet A. TUSUZ	Ph. D.	
Regional Agric. Research Institute, P.O.Box 9, Menemen Izmir	Ulubelde MACIT	M. Sc. Director	Breeding for high yield, high quality and resistance to diseases.
UGANDA Makerere University, Dept. of Soil Science, P.O.Box 7062, Kampala	David S. MUDUULI	Ph. D. Lecturer	Large scale isolation of vicine from faba beans. Fut. The suitability of faba bean agronomy in the agro-climatic environment of Uganda; use of faba beans in livestock and human diets.
YEMEN			
Agric. Research Centre, El-Kod, Aden	Shafiq ATTA	Ph. D. Director	
Technical Assistance of F.R.G., P.O.Box 861, Sana'a	J. W. FREDIEL	Ph. D.	
Ministry of Agriculture, UNDP (INTBAFRAD and FAO), Agricultural Research Service, P.O.Box 4788, Taiz	Ali E. KAMBAL	Ph. D.	

FAR EAST AND AUSTRALASIA

CHINA

Germplasm Resources Inst., Zeng ZHOU-JIE The Chinese Academy of Agricultural Sciences, Peking

Shanghai Academy of Agric. Zhou X. TAO Research, Institute of Crop Breeding Sciences and Cultivation, Shanghai

Qinghai Provincial Acade- Jiang SU-JUN my of Agricultural and Forestry Science, Qinghai Sining

N. S. TALEKAR Asian Vegetable Research Dev. Centre, P.O.Box 42, Shanhua, Taiwan 141

JAPAN

Michihiko YATAZAWA Nagoya University, Faculty of Agriculture, Dept. of Plant Nutrition and Fertilizers, Nagoya 464, Chikusa

Sumio FUKUYAMA Ehime University, College of Agriculture, Matsuyamashi 790, Ehime-Ken

Fukyama TOSHIO Ehime University, Faculty of Agriculture, Farm Crop Laboratory, Tarumi-tyo, Matsuyama City, Ehime-Ken

Fruit Tree Experiment Sta. Yasunobu TACHIBANA of Ehime Prefecture, Matsuvama City, Plant Pathology Lab., Ehime-Ken

Susumu UEDA

Sei-ichi MATSUI

Toh-Yo Office of, Plant Pathology and Entomology, Ehime Prefecture, Saijo City, Ehime-Ken

Hokkaido University, Faculty of Science, Chromosome Research Unit, Nishi 10, Kita 9, Sapporo City, Hokkaido

Research Assistant

Faba bean cultivation, breeding and cissue culture.

Fut. Polyploid breeding of faba bean.

Ph. D.

Research on soybean and mungbean. Some insect pests are common among faba bean, soy-Associate Entomologist bean and mungbean.

Professor

Fut. Rhizobium leguminosarum from Vicia faba will be studied in comparison with other Rhizobium species from the view of metabolic characteristics and host specifications.

Virologist

Vir.ologist

Ph. D.

Virus diseases.

Virus diseases.

Plant genetics.

INSTITUTE AND ADDRESS	NAME	QUALIFICATION & POSITION	RESEARCH INTERESTS
Kagawa University, Faculty of Agriculture, Crop Science Laboratory, 2393 Ikenobe, Miki-tyo, Kagawa-Ken	Kiyoshi KOGURE	Professor · Pr	Physiological studies of the growing process of faba bean plants including behaviour of 14C phytosynthetic products. ut.Physiological and ecological differences of varieties grown in various countries. Studies on the intra and interspecific hybrids, between Vicia species.
Kagawa University, Faculty of Agriculture, Genetics and Plant Breeding Laboratory, Miki-tyo, Kagawa-Ken	Kiyoshi YAMAMO Te) g	Professor	Studies on the intra and interspecific hybrids, between Vicia species.
Shikoku National Agric. Exp. Station, Plant Patho- logy Laboratory, Zentsuji-tyo, Zentsuji City Kagawa-Ken	Takashi YAMAMOTO y,		
Osaka Agric. Research Cen., Division of Plant Pathology and Entomology, Habikino City, Osaka			
Osaka Prefecture Univ., College of Agriculture, Lab. of Processing and Physiology of Horticul- tural Products, Mozu-umema- chi, Sakai City, Osaka	Takashi IWATA	Professor	
Saga University, Faculty of Agriculture, Crop Science Lab., Honjo-tyo, Saga City, Saga-Ken	Tenko N. TANAKA	Ph. D.	Studies on morphological and physiological characteristics of the plant root.
Saga University, Faculty of Agriculture, Plant Pathology Lab., Honjo-tyo. Saga City, Saga-Ken	Fukuji NONAKA	Ph. D. Plant Pathologist	Research work on plant diseases in general and chocolate spot in particular.
Tokyo University, Faculty of Science, Botanic Gardens, Koishikawa Hakusan 3-7-1, Tokyo 112	H. OHASHI	Ph. D.	
Tokyo University, Faculty of Agriculture, Plant Pathology Lab., Bunkyo-Ku, Tokyo	Satoshi OHKI	Ph. D.	General studies on plant virus diseases.

Nihon Nosan Kogyo Co. Ltd. Research Centre, 1-Daimura-Cho, Midori-Ku, Yokohama	Koji Totsuka	Head of Research Centre	Matabolizable energy content, protein digestability, and the value of including various levels of faba beans in rations for early chick growth for two varieties of faba bean samples.
AUSTRALIA New England University, Dept. of Agronomy and Soil Science, Armidale N.S.W.	Robin JESSOP		
Australian National Univ., Research School of Biolo- gical Science, D O Box 475.	J. E. BERINGER	Ph. D.	
Camberra City A.C.T. 2601 CSIRO, Division of Plant Indus., P.O.Box 1600,	J. BROCKWELL	Ph. D. Principal Research Scientist.	Rhizobium relationships of Pisum, Vicia, Lathyrus and Lens spp.
Canberra City A.C.T. 2601	L. T. EVANS	Ph. D.	Faba bean nodulation.
	Alan H. GIBSON	Ph. D.	
Waite Agric. Research Institute, Plant Patholo- gy Unit, S. A. 5064, Glen Osmond			faba bean for a Mediterranean-type environ- ment. Main concerns, apart from agronomic considera- tions, have been Ascochyta fabae and virus diseases.
	Musharaf ALI	Ph. D. Senior Research Officer	and breeding.
	Ronald KNIGHT	Ph. D. Researcher	Faba bean agronomy and breeding.
	Lester F. NITSCHKE	Ph. D. Research Officer	Evaluation of the adaptability of faba bean in rotation with wheat and barley in the South Australian cereal belt.
New South Wales Govern- ment, Division of Plant Industries, Sydney 2000,	J. STRANG	B. Sc. Principal Agronomist	
P.O.Box K 220 N.S.W. <u>Haymarket 2000</u> Tasmanian Dept. of Agric. P.O.Box 192 B <u>Hobart</u> , Tasmania 7001	•		Comparison of range of grain legumes including a number of <i>Vicia</i> lines. The grain will be used as a protein supplement in intensive livestock industries.
	P. F. WILLIAMS	B. Sc. Research Co-ordinator	
B.N. and J.M. Bell & Son: P.O.Box 97, South Australia 5280, Millicent	s, B. N. BELL		Seed company.

INSTITUTE AND ADDRESS	NAME	QUALIFICATION & POSITION	N RESEARCH INTERESTS
Roseworthy Agricultural College, Roseworthy South Australia 5371	·		 Agronomic studies on methods of faba bean production and the place of the crop in the rotation (it is a 'new' crop in South Australia). Evaluation of the nutritive value of the crop to non-ruminant animals, compared to other grain legumes.
	Basil BALDWIN	B. Sc. Lecturer, Head of Agro- nomy Department.	Agronomic studies on the effect of time of sowing and seed rates; on the production and growth of faba bean. Fut.1. Studies on the effect of tillage systems on the productivity of faba bean in a wheat-faba bean rotation. 2. Comparison of the yields of faba bean with other grain legume crops, and their effects on the yields subsequent of crops.
	David TAPLIN	Ph. D. Senior Lecturer, Head of Intensive Animal Produc- tion.	Evaluation of the feeding value of faba bean to growing chickens
Plant Research Division, Dept. of Agriculture, Jarrah Road, South Perth W.A. 6151			At present, germplasm screening and potential yield. It is anticipated that a limited plant breeding program will be established later.
	Graham H. WALTON	B. Sc. Research Officer	Germplasm screening and yield trials. Fut.1. Collaboration in international progeny testing. 2. Crop and plant growth analysis; potential yield trials. 3. Crop agronomy trials (population, fertilizers, weed control, pest control). 4. Plant utilization (dry seed, straw).
Agricultural Research Centre, R.M.B. 944, Tamworth N.S.W. 2340	Harry MARCELLOS	Ph. D.	Evaluation of the adaptability of faba bean in rotation with cereals in the wheat belt of N.S.W. Fut.Continuation and extension of the above research to encompass physiological investigation and varietal improvement.
Mallee Research Station, Victoria 3507 Walpeup	John GRIFFITHS	B. Sc. Officer in Charge.	Evaluation of a limited range of genetic material. Fut. Continuation and extension of above.
NEW ZEALAND D.S.I.R. Crop Research Division, Private Rag, Christchurch	John C. BUTEL	B. Sc.	Research covers disease resistance, yield, self-pollination, seed colour etc. of large and small faba bean. Evaluation of small seed types; three years
		Research Scientist	development of a composite population of types suited to the district.

			Fut. Evaluation of the composite material for:- 1. high yielding types 2. short growth (Im) 3. white seeded 4. determinate growth 5. early maturing 6. non shattering lines 7. possibly self pollinating.
D.S.I.R. Plant Diseases Division, Private Bag,	John W. ASHBY	Ph. D. Virologist	Survey of viruses of faba bean crops, including seed testing, epidemiology of viruses affecting faba beans and other legumes.
Christchurch	M. MALONE		
Kimihia Research Center, P.O.Box 939, Christchurch	Donald B. BISHOP	B. Sc. Chief Agronomist	 Evaluation of existing cultivars suitable for dry bean products for human consumption. Breeding for increased seed size and seed
			colour retention.
Lincoln University, Dept. of Microbiology, Christchurch	R. E. GAUNT	Ph. D. Senior Lecturer	The effect of Ascochyta fabae on faba (field +·broad) bean in N.Z. Emphasis has been placed on seed transmission, epidemiology, and chemical control. Fut.Investigation of infection processes, phytoalexin activity and disease interaction with host nutrient status.
	R. S. LIEW		
Lincoln University, Plant Science Dept., Christchurch	George D. HILL	M. Sc. Senior Lecturer	Evaluation of optimum sowing date, plant population, irrigation requirements, nitrogen fixation in the New Zealand environment. Put.Role of <i>Vicia faba</i> in cropping systems, evaluation of wide range of cultivars p rticularly new determinate lines when available.
Ministry of Agriculture, Private Bag,			Weed control; use of faba beans in a no-til- lage program.
Christchurch	J. H. BUTLER	Research Scientist	Tolerance of weeds and their control in faba bean.
Wrightson, N.M.A., Christchurch	R. S. GOWANS		
Yates Seed Research Com- pany, P.O.Box 16147, Hornby, Christchurch		•	Maintenance of foundation seed of "Early Seville' 'Coles Dwarf Prolific' 'Exhibition Long Pod' and 'Evergreen'. Elimination of Ascochyta and Botrytis from stock seed by seed treatment and spraying program. Breeding and selection a described below.
	Richard J. CASEY	Plant Breeder	Breeding and selection of upright determinate types for mechanical harvesting with pea viners for quick freezing.
	C II HANNING	Annonnist	Fut.Irradiation of large seeded faba bean.
	S. H. MANNING	Agronomist.	Ammonous of White Col 1 Control
Massey University, Agro, Department, Palmerston North	Sally D. NEWTON	B. Sc. Junior Lecturer	Agronomy of <i>Vicia faba</i> in Canterbury.

INSTITUTE AND ADDRESS	NAME	QUALIFICATION & POSITION		RESEARCH INTERESTS
THE AMERICAS				
ARGENTINA	A VEADOUTOVAG	n. n		
Universidad de Ciencias Agrarias, Dept. de Botanica Y Ecolo- gia, Casilla de Correo 209 3400 Corrientes		Ph. D.		
BOLIVIA				
Centro de Investigaciones Fitotecnicas y Ecogene- ticas de pairumani, Casilla 128, Cochabamba	Gonzalo AVILA			
Estacion Experimental de PATACA MAYA, IBTA/MACA, P.O.Box 5783, La Paz BRAZIL	W. T. POLO			Cropping systems and culture practices.
National Centre for Res. on Rice and Beans, BR-153, Km 4-Goiania/Aná- polis, Caixa postal 179, 74000 - Goias, Goiania	Homer AIDAR	Ph. D. Coordinator		
CANADA Agric. Canada Res. Station P.O.Box 1000, Vom IAO, Agassiz, B. C.	, Nigel A. FAIREY	Ph. D. Field Crop Physiologist	Fut.	Physiological and agronomic aspects of faba bean production.
Alberta Horticultural Research Centre, Bag 200 Brooks				'ultivar evaluation, agronomic and crop physiology studies, disease survey and control studies, with emphasis on root diseases, weed control studies and irribation studies.
Alberta TOJ OJO.	Refe G. GAUDIEL	Ph. D. Agronomist, Crop Physio- logist.		1. Cultivar evaluation. 2. Agronomic and physiological studies, incl. growth and nutrient accumulation patterns, seeding rates, seeding dates, harvest dates, desiccation for early harvest, fertilizer application, chemical and mechanical pruning, simulation of hail injury. Continuation of agronomic studies with possible plant nutrition studies to establish various sufficiency ranges.
	Ronald J. HOWARD	Ph. D. Plant Pathologist		Faba bean diseases.
	Shiraz P. SUMAR	M. Sc. Research Associate		1. Root diseases: surveys to determine and monitor incidence and severity in Alberta, economic losses incurred, varietal differences in root disease resistance.

			 Foliar diseases. Extension: routine seed testing for seed-borne diseases particularly Ascochyta blight. Fut. Foliar diseases: role and importance of Alternaria alternata and Botrytis spp. as foliar pathogenes.
King Grain Ltd., P.O.Box 1088, Chatham, Ontario, N7M S16	Frank SCOTT-PEARSE	Director of Research	
I.D.R.C., Suite 304, 10454 Whyte Ave, Edmonton, T6E 4Z7 Alberta.	R. S. FORREST	Ph. D. Associate Eirector	Supporting faba bean research in Alexandria University in Egypt. Fut.Continue supporting faba bean research and other research projects.
I.D.R.C. University of Alberta Campus, <u>Edmonton</u> T6G 2G6	Gordon YACIUK	Ph. D. Program Officer.	
Guelph University, Crop Science Dept., Guelph, Ontario NIG 2WI	David J. HUME	Professor	Current and future research are limited to variety testing,
Agric. Canada Research Station.			Limited examination of a new crop in a northern growing area.
Lacombe Alberta TOC JSO	W. B. BERKENKAMP	Ph. D. Plant Pathology	Evaluation and selection of varieties and lines for fodder and seed production (selecting lines for earliness). Fut.Combine earliness with small seed and low tannins in an adapted variety.
Agric. Canada Research Station, Alberta TIJ 4BI, Lethbridg <u>e</u>	J. P. MISKA H. MUNDELL	Librarian	
Agric. Canada Res. Station Manitoba, ROG IJO, Morden	, M. D. STAUFFER	Ph. D.	
International Development Research Centre (I.D.R.C.) Information Services, CO Queen Street, P.O.Box 8500, Ottawa KIG 3H9		Ph. D. Associate Director	
Université Laval, Cité Universitaire, Dept. de Phitopathologie, Quebec GIK 7P4	Pierre TURCOTTE		

INSTITUTE AND ADDRESS	NAME	QUALIFICATION & POSITION	RESEARCH INTERESTS
Saskatchewan Univ. of Agriculture, RM 133 Government Admin. Bldg., Regina, 5450BY Saskatchewan	John A. BUCHAN	ங். Sc. Special Crops Agronomist	Monitoring of Taba bean production in Saskat- chewan.
Pos. Pilot Corporation, U of S Campus, Saskatoon, Saskatchewan S7N 2R4	Mark REINEKE	Information Coordinator	Legume processing technology.
Saskatchewan University,	G. G. ROWLAND	Ph. D.	
Crop Dev. Center, Saskatoon, Saskatchewan S7N OWO	A. E. SLINKARD	Ph. D. Research Scientist	Faba bean phosphate fertilization: rates and placement. Fut.Irrigation frequency and amount.
Saskatchewan University, Dept. of Biology, Saskatoon,	R. A. MORRALL	Professor	Screening new advanced varieties. Fut.Breeding lines for resistance to Ascochyta fabae and other pathogens.
Saskatchewan S7N OWO. Saskatchewan University, National Research Council, Prairie Regional Lab., Saskatoon, Saskatchewan S7N OW9			 Air classification and wet processing of faba bean. Chemistry, modification and properties of faba bean starch. Nutritional significance and chemistry of faba bean tannins.
	B. M. CRAIG	Ph. D.	
	Robert T. TYLER	Ph. D. Student	 Air classification of pin milled faba bean flours. Wet milling of faba bean. Faba bean cell wall studies. Fut. Further characterisation of faba bean cell walls; comparison of cell wall isolation methods with respect to yield, composition, and properties of isolated cell wall material.
	C. G. YOUNGS	Ph. D.	
46IC. St. Clarens Ave., Apt. A., <u>Toronto</u> , Ontario, NGH 3W4.	John WILSON		
Manitoba Pool Elevators, Seed Department, Winnipeg, Manitoba, R3T 2E7	Joseph F. FURGAL	Legume Breeder	Varietal Development, mainly small-seeded minor types.
Manitoba University, Agriculture Services Hldg. <u>Winnipeg</u> , Manitoba, R3T 2N2	G. PLATFORD 'Khaled RASHED	Ph. D.	

Manitoba University, Dept. of Animal Science, Winnipeg, Manitoba R3T 2N2

	R. R. MARQUARDT	Professor	size 2. De the i and co are t 3. De direc using
			Fut.1. In logic 2. St of ar 3. Me labil
	S. C. STOTHERS	Professor Swine Nutrition	Fut.Reseaby pr
Manitoba University, Faculty of Agriculture, Dept. of Food Sciences, Winnipeg	Don MURRAY	Ph. D. Head of Department.	Food dusti
Manitoba University, Faculty of Agriculture, Dept. of Human Ecology, Winnipeg	Marian VAISEY	Ph. D.	Use (indu:
Manitoba University, Dept. of Plant Science, Winnipeg, Manitoba R3T 2H2	Claude BERNIER	Professor Plant Pathologist	Faba host vici Etio Deve
	Walter BUSHUK	Professor	
	Ken W. CLARK	Professor	1. F tati qual 2. R cati 3. F
			Fut.1. C

J. R. INGALLS

TOTALINGE OF OF

Professor

Professor

Production and utilization of faba beans (Depts. of Plant and Animal Sciences).
Production studies include agronomy, breeding and pathology. Utilization studies include feeding studies in poultry, ruminants and non-ruminants.

Evaluation of several different lines of faba beans for silage.

- 1. Isolation and identification of the egg size depressing factor in faba bean.
 2. Development of a simplified procedure for the isolation of large quantities of vicine and convicine from faba bean (these compounds are to be used in animal feeding trials).
 3. Development of a simplified assay for direct quantitation of vicine and convicine using HPLC.
- Fut.1. In-vitro and in-vivo studies on the physiological effects of vicine and convicine.

 2. Studies relating to the genetic variability of antinutritive substances in faba bean.

 3. Metabolisable energy and amino acid availabilities of faba bean cultivars.
- Fut.Research on protein quality of faba bean by products.

Food quality and use of protein in food industry.

Use of faba bean as a human food, (food industry).

Faba bean pathology: pathogen variation and host resistance to Ascochyta fabae, Uromyces viciae-fabae and bean yellow mosaic virus. Etiology of seedling blight and root rot. Development of multiple resistance cultivars.

- 1. Faba bean as the grain-legume in crop rotations. N-fixation balance measurements to qualify the role and benefit of faba bean.

 2. Rhizobium strain evaluation and identification for use in Manitoba.

 3. Faba bean cultivars for silage. Methods of utilization of faba bean.
- Fut.1. Cultivar and breeding lines (advanced generations), compatibility with the best Rhizobium strains.
 - 2. Continuation of agronomic studies (3 years) in rotation type experimentation.

INSTITUTE AND ADDRESS	NAME	QUALIFICATION & POSITION	RESEARCH INTERESTS
	T. J. DELVIN		NASCENION TO AND TO
	L. E. EVANS	Ph. D.	
	Ernest HOEHN	Ph. D.	
	Peter B. McVETTY	Assistant Frofessor Grain Legume Breeder	Faba bean breeding of early, disease resistant, small seed sized, shattering resistant, high protein low tannin, low crude fibre faba bean cultivars. Fut. Expanding program into quality areas concerning amino acid balance, elimination of vicine and/or convicine and reduction of elimination of condensed tannins.
	I. N. MORRISON		
	E. H. STOBBE	Ph. D.	
	M. M. YOUSSEF	Ph. D.	
CHILE			
Estacion Experimental, Quilamapu (INIA),	Oscar C. PAREDES		
Casilla 426, Chillan	Juan TAY	Agricultural Engineer Breeder of Agronomy Pul- ses.	
Instituto de Investigac- iones Agropecuarias, Estacion Experimental, La Platina, Santiago	Jorge AESCHLIMANN		
Instituto Colombiano Agropecuarios, Apartado Aereo 819 Pasto-Narino			Determination of varieties resistant to virus diseases such as 'moteado'; organisation of germplasm bank; collection of faba bean native types; evaluation of faba bean lines.
	Bernardo E. SILVA		Research work and trials on fertilization, spacing of plantation, seed selection, sowing, Botrytis control. Fut.1. Effects of different methods of fertilization and levels of application on faba bean cultivation. 2. Effects of plant population. 3. Comparison between some regional varieties. 4. Botrytis fabae sard control with appli-
COSTA RICA			cation of four fungicides.
CATIE, (Centro Agronomia Tropi-	Gustavo A. ENRIQUEZ	Ph. D. Plant Breeder	Plant breeding.
cal de Invest. y Emsenanza), Turrialba	Miguel HOLLE	Ph. D. Horticulturist	Seed production methods and breeding.
	Heleodoro MIRANDA	Ph. D.	

EC	U	٨	DO	R

Escuela Superior Politecnica de Chimborazo, Facultad de Agronomia, Chimborazo Casilla 4703, Riobamba.

INIAP, Food Legume Program, Quitto, Apartado 2600 F. ENRIQUES Ph. D.

GUATEMALA

ICTA, Donald KASS Ph. D.
5a Ave. 12-31 Agronomist
Zona 9
Edificio El-Cortez 2º Y3º Silvio H. OROZCO Ph. D.
Niveles.

Guatemala
INCAP (Instituto de Nutricion de Centro America
y Panama). P.O.Box 1188,

Ricardo BRESSANI Ph. D.
Head of Agricultural and
Food Chemistry Division.

1. Utilisation of faba bean in food systems. Raw and processed faba beans are being used as protein supplements to cereal grain flours, or as protein components in high protein foods for child feeding.

2. Studies on effects of processing on chemical composition, functional characteristics and nutritional value. Other studies include nutritional components limiting the nutritive

value of faba bean.

Fut. As indicated above and including economic feasibility studies.

HONDURAS

Guatemala

Programa Nacional de Investigaciones Agricolas,
Secretaria de Recursos
Naturales, Blved.

Nicolas MATEO c/o
P
Adnan BONILLA

Ph. D.

Miraflores, Tegucigalpa

MEXICO
INIA, Campo Agricola Exp. E. A. ARIAS Ph. D.
Bajio, California Coordinator

Apdo, Postal No. 112, Celaya, GTO

Universidad Autonoma Cha- M. C. ESTEBAN S. VEGA pingo, Dept. de Fitotecnia, Sec. de Cultivos,

Chapingo

Jalisco

Apdo Postal 10, Luis O. RODRIGUEZ Chapingo

Faba bean Breeder

Faba bean breeding and agronomy.

Apdo Postal 56, Santiago S. PRECIADO Tepatitlan

Head of Grain Legume Program.

:NSTITUTE AND ADDRESS	NAME	QUALIFICATION & POSITION	RESEARCH INTERESTS
<u>PERU</u> Jirón La Torre N ^O 1000, Cajabamba, Cajamarca.	Cruz R. JESÚS	Agricultural Engineer	Evaluation of small (national) germplasm of faba bean. Fut.Breeding of faba bean and selection of the best material.
Estacion exptl. Vesta florida, CRIA de Norte, Aptdo. 116, <u>Chiclayo</u>	Cesar APOLITANO	Ph. D. Coordinator	
General de Investigacion Agraria (DGI), Ministerio de Alimentacion, <u>Lima</u>	H. Moreno JERI	Ph. D. Director	Seed preparation and production.
Instituto de Nutrition, Jr. Tizon y Bueno 276, Jesus Maria, <u>Lima</u> II	Rainer GROSS	Ph. D.	
Universidad Nacional Agra- ria La Molina, Dept. de Fitotecnia, Apartado 456, Lima	•		The food legume program works in the highland areas to produce varieties with improved protein content.
	Alfonso CERRATE	Senior Professor Program Leader of Grain Legumes.	Selection and genetic breeding for yield, earliness, short plant, and tolerance to Anthracnose and Ascochyta diseases.
	M. Leonor MATTOS	Legume Pathologist	Legume pathology.
	Felix C. MAYTA Martha C. MOREY	Associate Professor Agronomist	Germplasm evaluation and selection for yield, early maturity, tolerance to diseases and insects. Fut.Breeding of faba bean commercial variety, with hybridization and selection for early maturity, and resistance to root diseases.
PUERTO RICO			·
Mayaguez Inst. of Tropical Agriculture, P.O.Box 70, Mayaguez OO7O8 URUGUAY	G. F. FREYTAG	Ph. D. Research Geneticist Program Leader	Germplasm maintenance.
Cor-nel pereda 1525, <u>Montevideo</u> U. S. A.	C. A. LABANDERA	Ph. D.	
National Agricultural Library, TIS/SEA/USDA, Current Serial Records, Beltsville, Maryland 20705.	Ms. BOBA	Librarian	

Colorado University, 1229 University Avenue, School of Business and Administration, information Science/Genetic Resources Program, Boulder, Colorado 80309.	K. RAWAL	Ph. D.	
Montana University, College of Agriculture, Dept. of Plant and Soil Sciences, Bozeman 59717			Evaluation of faba bean varieties for salt tolerance. Use of irrigation practices to modify saline environments. Evaluation of nodulation, nutrition, dinitrogen fixation and seed and forage production. Co-operative research with Faculty of Agriculture, Alexandria University, Egypt.
e van een een een een een een een een een e	Ronald H. LOCKERMAN	Assistant Professor of Horticulture	Salinity and water stress effects on dinit- rogen fixation in faba bean.
	James R. SIMS	Professor Faba bean Project Leader.	 The effect of salinity and water stress on symbiotic N-fixation by Vicia faba and Phaseolus vulgaris. The effect of various parameters of fertilizer on symbiotic N-fixation by Vicia faba and Phaseolus. Restoration of dryland (rainfed) soils with annual legume-cereal rotations.
South Dakota State Univ., Brooking South Dakota 57006.	Solomon TUWAFE	M. Sc.	
Michigan State University, Dept. of Crop and Soil Sciences, East Lansing, Michigan 48824	Nassratullah WASSIMI '	M. Sc.	
Colorado State University, College of Agricultural Sciences, Lab. for Information Sci. in Agric. (LISA), 301 Aylesworth Hall, Fort Collins Co 80523		M. Sc. Research Associate	Research work aims at making crop data stored at the plant introduction stations available to plant breeders with the help of computers. This research deals with many crops including faba bean.
N.Y.S. Agric. Experiment Station, Department of Seed and	Michael H. DIKSON	Professor	Research work does not concern faba bean directly, but Vicia research as it relates to Phaseolus Vulgaris.

Department of Seed and Vegetable Sciences, Geneva, NY 14456.

Roger A. KIRKBY

Cornell University, Plant Breeding Dept., Ithaca, N.Y. 14853

INSTITUTE AND ADDRESS	NAVE-	QUALIFICATION & POSITION	RESEARCH INTERESTS
Idaho University, College of Agriculture, Moscow, Idaho 83843	E. O'KEEFE	Ph. D. Entomologist	
Washington State Univ., 59 Johnson Hall, Pullman Washington 99164			Maintenance, multiplication and distribution of the USDA Plant Inventory (PI) collection of Vicia faba. Seed is distributed to interested researchers in the United States and abroad.
	Walter J. KAISER	Plant Pathologist	 Research work on faba bean for maintaining the plant inventory (PI) collection of Vicia faba that relates to the U.S. Dept. of agriculture. Research on the disease that affect Vicia faba when the different plant inventory accessions in the Vicia faba collection are grown for seed increase at Pullman.
Oregon State University, Dept. of Statistics, Corvallis Oregon 97331	Roger PETERSEN	Ph. D. Statistics and Biometric	ខន
California University, Dept. of Botany and Plant Sciences, Riverside, CA. 92521	William H. ISOM	Ph. D. Extension Agronomist	Cultural practices on some faba bean cultivars to see if they might be adapted for production in Southern California. Fut.Continuation of the above on more varieties of faba bean, to identify insect and disease problems, and determine optimum cultural practices.
Minnesota University, College of Biological Sci Dept. of Biochemistry, 140 Gortner Lab. 1479 Gortner Avenue, Saint Paul Minnesota 55108.	Irvin E. LIENER	Professor	
1133 20th Street N.W., Washington D.C. 20036	Raymond F. ALTEVOGT		

EUROPE

AUSTRIA

Bundesanstalt f. Pflanzen- K. NAGL bau, 1020 <u>Vienna</u>

International Atomic Ener- Helmuth BRUNNER gy Agency (IAEA), Wagramerstrasse 5, P.O.Box 100, A-1400 Vienna

Ph. D.

Ph. D.

Mutation breeding with Vicia faba minor on:-

- 1. Yield via yield components.
- 2. Protein vield.
- 3. Protein quality.
- 4. Nutritional quality.
- 5. Symbiotic No fixation.

Fut. Screening for anti nutritional factors and development of plant ideotypes better suited to rotation systems. The aim is to make field bean economically competitive with cereals for supplementing diets, and thus to constitute a basis for better balanced food for man and feed for animals.

- 1. Mutation induction methodology studies.
- 2. Research on mutation breeding methodology in cereals and pulses.
- 3. Development of multiple heterozygous markers in Capsicum to facilitate studies 1. and 2.
- 4. Development of mass-screening methods to identify desirable mutants.
- 5. Giving seed irradiation services to IAKA member countries and international institutions.
 6. Training.
- 7. Advice and guidance to mutation breeders in developing countries.

Coordinating and supporting mutation research and related breeding.programmes with grain legumes including *Vicia faba*, through research contracts.

Joint FAO/IAEA Division, V.I.C., P.O.Box 100, A-1400 Vienna

Alexander MICKE

Professor Head of Plant Breeding and Genetics Section

BELGIUM

Division of Market Organi- N. TANGHE sation, Commission of European Communities, 200, rue de la Lois, 1049 Brussels
Station d'Amélioration Pol DERENNE

Station d'Amélioration des Plantes, 4, rue du Bordia, B-5800 Gembloux Ph. D.

Head of Department

- 1. Field bean breeding, new varieties. Main aims: yield and precocity. Small seeded, white seeded and tannin-free varieties.
- 2. Experiments on the rate of auto and allopollination and the subsequent influence on yield.
- Determination of the moment of auto-pollination, in terms of flower aspect and development.
- 4. Some gamma-ray treatment of seeds.

	*****	QUALIFICATION & POSITION	RESEARCH INTERESTS
CZECHOSLOVAKIA	NAME	QUALIFICATION & POSITION	
Institute of Experimental Botany, Czechoslovak Academy of Science, Flemngovo 2, Prague 6	E. KLOZOVA	Ph. D.	
Katedra Botaniky Prirodo-	A. SKALICKA	Ph. D.	
vedecka, Fakulta K. U., Benatska 2, 12801 <u>Praha</u> 2.	Zdenka SLAVIKOVA	Ph. D.	
Botanical Institute, Czechoslovak Academy of Sciences, 25243 Pruhonice u Prahy	A. CHRTKOVA	Ph. D.	
DENMARK	T. C. I. OLGT	Ph. D.	
NOVO Industri A/S, NOVO Alle, DK-2880 Bagsvaerd	H. Sejr OLSEN	PH. D.	
L Daefeldt Ltd., P.O.Box 185, DK-5100 Odense C.	Chr. PEDERSEN		gada- ail and protain plants
Danish Plant Breeding Ltd. Boelshoj, 4660 Store-Heddinge	,		Breeding all fodder, oil and protein plants for the temperate zone. Research on isoenzyme techniques, quantitative analysis etc.
	Morten H. POULSEN	Ph. D. Plant Breeder	1. Variety composition 2. Complete autogamy 3. Re-modelling of the fruit and of the distribution of the biomass. 4. Genetics of the glucoside content, 5. Maintaining an autotetraploid line. Fut.1. Isoenzyme techniques 2. Metabolism and quality of grasses. 3. Quantitative analysis and genetics of glucosinolates in oil seed rape.
Royal Veterinary & Agric. University, Dept. of Crop Husbandry and Plant Bree- ding, Hojbakkegard, DK-2630 Taastrup.	J. Chr. N. KNUDSEN	Research Associate	 Variety composition-closed flower types. Autofertility. Variety types, plant models. Anti-nutritional factors.
EAST GERMANY	Deter HANDIE	Ph. D.	Plant genetic resource work, collection of lan
Akademie der Wissenschaf- ten der DDR, Zentralinstitut für Genetik		Head of Research Team	races in European countries and their evaluation taxonomic studies on the collection.
und Kulturpflanzenfors - chung, Corrensstrasse 3, 4325 Gatersleben	Christian LEHMANN	Ph. D.	
Institut fur Tropische, Landwirtschaft der Karl- Marx-Universitat, Leipizig DDR 7030, Leipizig, Fichtesr, 28	G. FROHLICH .	Professor	

<u>PINLAND</u> Hankkija Plant Breeding			Limited faba bean breeding, based on local
Institute, SF-04300			Carelian strains, which are extremely early and frost resistant.
Hyryla	Simo S. HOVINKN	M. Sc. Head Breeder Fu	 Faba bean breeding on a very practical level. Trials to clarify the amount of biological nitrogen fixation on yield conditions. Intercropping with feed cereals. Cultivation and breeding of faba bean.
FRANCE			
E tablissements Blondeau, B.P. No.1 59235 <u>Bersee</u>	M. VERHAEGEN		Seed production.
Faculty of Science, Place Leclerc, F-25030 Besancon	Millet BERNARD	Professor	Physiology of growth in Vicia faba L.; analysis of growth rhythm, relation between flowering and growth rhythm.
Laboratoire Botanique, Institut Sc. Naturelles, 25042 <u>Besancon</u> -Cedex.	D. MELIN	Ph. D.	
E tablissements Clause, 91220 Bretigny sur Orge,	Marc MASSON	Agric. Engineer	Breeding and improvement of faba bean: Canned beans. Tannin-free seed.
Station d'agronomie, B.P. 12, 31320 <u>Castanet Tolsoan</u> .	J. PUECH	Ph. D.	
INRA Station de Zoologie, 28 rue de Herrlisheim. B.P. 507, 68021 Colmar Cedex.	Yves BOUCHERY	Ph. D. Head of Research Program	 Biology of the black bean aphid \$phis fabas. Losses of yield in spring field beans. Chemical and biological disease control of faba bean.
INRA Station d'amélioration des Plantes, B.P. 1540, 21043, <u>Dijon</u> -Cedex	.		Study of cytoplasmic male sterility, to gain a better understanding of the hereditary basis of CMS, incidence of environmental factors; trying to find new or modified types of CMS. Study of yield, yield stability and flower wastage. Modification of plant type.
	Gerard DUC	Ph. D. Assistant Researcher	 Breeding on the cytoplasmic male sterility in faba bean to produce hybrid seeds. Genetic and physiological study of the abscission of flowers and young pods in faba bean. Mutagenesis in faba bean.
	Jean PICARD	Director of Plant Breeding station.	Breeding for: 1. Yield through cytoplasmic male sterility and improvement (new types if possible) of CMS. 2. Quality by: improvement of crude protein content of tannin-free types. t.Development of work on yield stability by more or less physiological studies and definition of an ideotype. Breeding for this ideotype.

INSTITUTE AND ADDRESS	NAME	QUALIFICATION & POSITION	RESEARCH INTERESTS
INRA Station de Recherches	M. BOURDON		Animal nutrition
sur l'Elevage des Porcs, C.N.R.Z.,	M. HENRY		Animal nutrition
78350 Jouy en Josas			
Grandes Minoteries à Fèves de France, Rue Henri Bessemer, Z.I. <u>Aix Les Milles</u> 13290	M. LALLEMANT		
Station d'Amélioration des Plantes, INRA., B.P. 29, 35650 <u>Le Rheu</u>	Pierre BERTHELEM	Agronomist	 Testing hybrid vigour in field bean and testing its practical use by mean of cytoplasmic male sterility. Trials to achieve increase in yield by use of recurrent selection for yield components, adaptative factors and quality (O-tannins). Continuation of the selection of better maintainers of CMS, by control of environmental factors (temperature and light) at the beginning of the multiplication of lines. Pursuit of the screening of new CMS induced by mutagenesis (in collaboration with DIJON). Research of new ideotypes of field bean with a better harvest index and smaller seeds.
	Francoise ROUSSELLE	Research Assistant	Research for resistance or tolerance to Botry- tis fabae: 1. Studies of the fungus and the disease in collaboration with pathologists, experimenta- tion of artificial inoculation in field and of chemicals, to control the disease. 2. Search for resistant genotypes in the species Vicia faba. 3. Studies on related species (especially Vicia narbonensis) and attempt to realise hybridization (pollination techniques, use of tetraploids, in vitro embryoculture). Fut.1. Use of mutagenesis if a good screening for resistance exists. 2. Use of the genitors issued from interspeci- fic crosses.
	M. LE GUEN		Male sterility
	Joel F. LE GUEN	Agronomist	Recurrent selection for yield components; the aim is to make synthetic varieties with the best of them. Fut.Continuation of recurrent selection for increasing yield.
INRA Station d'Amelioration des Plantes Fourragers,			Study of genetic variability of faba bean resistance to Botrytis fabae.
86600 <u>Lusignan</u>	Jean GONDRAN	Pathologist	Artificial inoculation tests for selecting plants of fodder bean resistant to Botrytis fabae. Fut.Possible study of the factors of resistance stability.

Animal feed Institut Technique des C. LELONG Cereales et des Fourrages, Luc LESCAR Head of Plant Protection 1. Study of the disease Botrytis fabas. Station Experimentale 2. Use of herbicides. (ITCF), Boigneville, 3. Use of pesticides especially for Aphis F-91720 Maisse fabae. INRA Station de Recher~ M. LARBIER Animal nutrition (poultry). hes Agricoles, B.P. 1. Nouzilly. 37380 Monnaie Station d'Amélioration des C.CLAVIER Plantes, CRAM.. 34060 Montpellier Cedex Faba bean mainly studied for high protein content. INRA Station de Biochimie Main aim is to develop industrial process for des Aliments. Chemin de la Geraudiere. protein isolate preparation. Also study of composition, structure and functional proper-44072 Nantes ties of faba bean starch and fibres. Nutritional studies also made on protein isolate and by-products. Chemical composition (sugars) of Vicia faba. Mme. GREENWOOD-MERCIER INRA Laboratoire de Tech- M. DELORT-LAVAL Feed technology. nologie des Aliments des Animaux. Chemin de la Geraudiere. 44072 Nantes 1. Cytoplasmic male sterility, discription of INRA Laboratoire d'Amélio-Hervé THIELLEMENT Ph. D. ration des Plantes. Head of Research Progthe phenomenon (instability, phenotypic heterogenicity) and understanding its genetic deter-Paculté des Sciences. ram. minism. Université de Paris-Sud Fut. Molecular approach of Vicia faba. Batiment 360 91405 Orsay Cedex. General and economic aspects of Vicia faba. AMSOL M. HELLE 12, Avenue George V, 75008 Paris Grandes Minoteries a Feves P. HISARD de France, Dominique VALLERY-MAS-Director General 44, rue du Louvre. SON. 75001 Paris .Philippe PLANCQUAERT Head of Forage Section 1. Studies to improve productivity of faba Institut Technique des Céréales et des Fourrages. bean. 8, Avenue du President 2. Comparison of cultivars, chemical treatments with herbicides insecticides and fungi-Wilson. cides. **75116 Paris** 3. Studies on the transformation of Vicia faba products by pig, poultry, cow and beef. Put Soil and climatic studies to achieve the optimum conditions for good production of

INRA., 149, rue de Grenelle, 75341 Paris Cedex 07 Max RIVES

Head of Plant Breeding Department.

Vicia faba.

INSTITUTE AND ADDRESS	NAME	QUALIFICATION & POSITION	RESEARCH INTERESTS
Oleagri Recherches et Developments, (O.R.D.), 12, Avenue George V, 75008 Paris	C. DION		
Laboratoire de Cytologie & Morphogenese Vegetables, UER 59,	C. SALLE	Ph. D.	
Université Pierre et Marie Curie, 4 Place Jussieu, 75230 <u>Paris</u> Cedex O5			
INRA Laboratoire de Re- cherches sur les Protéines CNRA., Route de Saint Cyr, 78000 <u>Versailles</u>	M. MOSSE		Chemical composition (proteins) of Vicia faba
GREECE Phytomethological	Hebe KOUYEAS	Mycologist	Rust diseases of faba bean.
Benaki Phytopathological Institute,	Christos YAMVRIAS	Entomologist	Insect pests of faba bean.
Odos Delta 3, Kiphissia, Athens	· ·	220202030	•
Ecole Supérieur d'Agri- culture, Votanicos, Athens	Constantine DALIANIS	Plant Breeder	Breeding of faba bean.
Ministry of Agriculture,	Joyce CLARKE		
Agricultural Research Ser- vices, 22 Menandron Street		Ph. D.	and discount of take hear
Athens 112	John PROCOPIOU	Ph. D. Plant Scientist	Cooking quality and diseases of faba bean.
Podder Crops and Pastures Institute, Larissa			Faba bean research includes field experiments to compare varieties, and weed control experiments.
<u> </u>	Constantine J. PODIMATAS	Agronomist	 Breeding for resistance to Sclerotinia sclerotiorum. Selections of resistant plants, free crosses between half sibs of them in isolated blocks, and comparison of selected genotypes Fut. Breeding for yielding ability of faba bean cultivars, evaluation of adaptability and field experiments for studying the different problems of faba bean cultivation.
	Evangelos L. STYLOPOU- LOS	Ph. D.	Forage germplasm diseases.
Department of Genetics and Plant Breeding,	Mohammad F. AHMAD c/o Mohammad ALIAS	Ph. D. Student	Breeding of Vicia faba.
School of Agriculture and Forestry, University of Thessaloniki Thessaloniki	Demetrios POUPAKIAS	Ph. D. Sub-Professor	Fut.Breeding of faba beans for yield increase based on individual plant performance.

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Bari University, Faculta di Agraria, Istituto di Agronomia e Coltivazioni Erbacee, Via Amendola, 165/A 70126 Bari

V. V. BIANCO Ph. D. Giovanni DAMATO Ph. D. Andrea FILIPPETTI Plant Breeder

Ciro de PACR

Asst. Professor

Luigi RICCIARDI

G.T.SCARASCIA-MUGNOZZA

Plant Breeder

V. MARZI Vito MICCOLIS

Researcher

Professor

Ph. D.

Professor

Bari University, Istituto di Miglioramento Genetico delle Piante Agrarie, Via Amendola 165. 70126 Bari.

Laboratorio del Germoplas- G. B. POLIGNANO ma CNR, Via G. Amendola, E. PORCEDDU 165/A. 70126 Bari

Libri dal Mondo S. R. L. (LDM), P.O.Box 342, Bari

Ph. D.

- 1. Constitution of high yielding and well adapted varieties.
- 2. Selection for autofertility and studies on the breeding system.
- 3. Intraspecific hybridisation (major x minor type).
- 4. Induction of new variants by gamma-ray treatment.
- 1. Assessment of proper breeding strategy in the species.
- 2. Application of methods for describing and utilising the natural and induced variability in the species.
- 3. Introduction of useful criteria of selection for a better adaptability and production of the selected type.
- 1. Studies on the inheritance of seed coat colour.
- 2. Competition studies and measurement of fitness components for gaining information on the micro and macroevolution of Vicia faba populations.
- 3. Studies on flower biology.
- 1. Preliminary studies on faba bean for fresh market, canning and freezing.
- 2. Weed control in faba bean.
- 3. Topping in faba bean.
- 4. Influence of plant density on 121 Italian accessions of Vicia faba.

INSTITUTE AND ADDRESS	NAME	QUALIFICATION & POSITION	RESEARCH INTERESTS
Universita di Catania,	Valerio ABBATE	Professor	
	Salvatore FOTI	Professor Director of Institute of Agronomy.	
			Selection of locally inbred lines suitable for green pod production. Heritability and self-fertility also studied on plants with tripped and undisturbed flowers. The proportion of cross fertilisation as affected by environmental conditions and types also studied, as is effect of some technical treatments on seed characteristics.
	Giuseppe LA MALFA	Ph. D. Director	 Selection of new genotypes suitable for production of green pods. Studies on self fertility. Technical and genetic aspects of seed production.
	M. NOTO	Ph. D.	 Rstablishment of high yielding lines. Auto-fertility studies. Seed multiplication.
I. V. T. P. A. Istituto Sperimentale per la Valorizzazione Tecxno- logica dei Prodotti Agri- col, Via G. Venezian, 26-20133 Milano	Andrea MONZINI	Ph. D.	
Universita di Napoli, Istituto di Agronomia Generale e Coltivazioni Erbacee, Portici-Napoli	Francesco BASSO	Ph. D.	a
Naples University, Cattedra di Miglioramento Genetico, Facolta di Ag- raria, Via dell'Universita 100, Portici-Napoli.	Luigi M. MONTI	Professor	Studies on the genetic structure of field bean; (% outcrossing; effects of lack of tripping, inbreeding depression, lower selfing ability of inbred plants on seed yield). Fut.1. Definition of new selection methods suitable for faba bean crop. 2. Induction of mutations for new plant types and with new chromosome rearrangements (like duplicated chromosome segments). 3. Breeding for resistance to water stress or excess, and for autofertility.
Naples University, Istituto di Agronomia	Luigi POSTIGLIONE	Professor Director	Research work on agronomy and amino acid composition.
Generale e Coltivazioni, Erbacee Portici- <u>Napoli</u>	Rosa RAO	Ph. D. Researcher	Electrophoretic screening of globulins extracted by different genotype classes of faba bean, obtained by breeding. Isolation and characterisation of protein fractions showing different electrophoretic patterns among the analysed samples. Comparative study of globulins obtained from cotyledons and from protein fractions previously isolated.

Istituto di Agronomia. Via Gradenigo, 6 35100 <u>Padova</u>	L. TONIOLO U. ZILIOTTO	Professor Ph. D.
Istituto di Agronomia, Generale e Coltivazioni Erbacee, Universita degli Studi, Viale delle Scien- ze, 90126 <u>Palermo</u>	Giuseppe DI PRIMA Riccardo SARNO Luigi STRINGI	Professor Professor Professor
Palermo University, Istituto di Orticultuea e Floricoltura, <u>Palermo</u>	Pietro CARUSO	Professor

G. MOSCA

Ph. D.

Ph. D.

Padova University,

Istituto di Agronomia.

F. A. O., A. BOZZINI Crop and Grassland Production Service, Plant Production and Protection Div.. Via delle Terme di Caracalla, ^100 Roma.

Krna BENNET

F. A. O., Via delle Terme di Cara-H. A. AL-JIBOURI Ph. D. calla, 00100 Rome Istituto d1 Agronomia, M. RIVOIRA Professor Via Enrico de Nicola. Sassari-Sardegna

Put.Biochemical study of globulin fractions and amino acid composition.

Agronomic trials relating to:-

- 1. Introduction of accessions and their evaluation.
- 2. Spring and autumn sowing dates.
- 3. Plant density
- 4. Crop rotation

Breeding for Orobanche resistance.

Improvement of faba bean for animal consumption

- 1. Study of the germplasm of Vicia faba by means of an appraisal of the numerous local varieties and samples taken from other sources. 2. Further studies oriented towards isolating individual characteristics of the resistance of the faba bean plant to Orobanche crenata and to chemical parasite control.
- Fut.Research work aims to produce two types of faba bean:-
 - 1. faba bean with long regular shaped pods and high fertility rate, the seeds of which are consumed fresh.
 - 2. faba bean with pods containing a high number of very large seeds for human consumption in a dry state.

INSTITUTE AND ADDRESS	NAME	QUALIFICATION & POSITION	RESEARCH INTERESTS
THE NETHERLANDS		_	1
Research Station for Arable Farming and Field Production of Vegetables (PAGV), delhertweg, 5.0.Box 430, 8200 AK Lelystad.	В		Aim to translate fundamental work into practice. Projects include the study of varieties, time of sowing in relation to yield and harvest period, plant density, phosphate side-band placement, weeds, pests and diseases and harvest losses. These studies made on faba beans grown for canning, freezing and for protein production alike.
	P. H. DEKKER	Academic Research Wor- ker.	Study of the influence of the growth regula- tor 'Bg' on the yield of faba bean for canning and freezing.
Zelder Plant Breeding Sta., 6595 NW Ottersum	J. C. BOONMAN	Ph. D. Director of the Station	Breeding.
D.J. Van der Have BV, P.O.Box 1, 4410 AA Rilland	F. DE WOLFF	Ph. D. Plant Breeder	Variety testing.
Nickerson-Zwaan B.V., Prinses Mariannelaan 296, 2275 BR <u>Voorburg</u>	G. P. VAN BENTUM	Ph. D. Head of Beans, Leafy, and Root Vegetables Breeding Dept.	Development of new faba bean varieties.
A. R. Zwaan and Zoom, Prinses Mariannelaan 296, Postbox 992 2270 AZ Voorburg	J. VAN HAL		
Foundation for Agricultural Plant Breeding SVP, P.O.Box 117, 6700 AC Wageningen	R. J. HERINGA	Ing. Leader of Legumes Project.	 Yield and yield stability of faba beans and lupins. Evaluation of quality and quantity of protein in both crops. Study of the effect of nitrogen fixing bacteria (Rhizobia) on yield. Research on faba beans for yield of green mass for silage. Fut. Influence of drought on yield; use of more tolerant types in a breeding programme.
Agricultural University, Microbiology Lab., P.O.Box 8033, 6700 EJ Wageningen	A. HOUWERS		Studies on nodulation and nitrogen fixation of Vicia faba.
Agricultural University, Institute of Plant Breedin 166, Lawickse Allee, Wageningen	W. C. NIEMANSVERDRIET g,	Librarian	
Agricultural University, Dept. of Theoretical Pro- duction Ecology, Bornse Steeg 65, 6700 PD Wageningen	Jan GOUDRIAAN	Ph. D. Senior Researcher	 Photosynthesis and transpiration of faba bean as influenced by water shortage. Modelling crop growth of Vicia faba.

Centre for Agrobiological G. DANTUMA Ph. D. Research. Postbus 14. Bornsesteeg 65/67. Wageningen Instituut voor Bewaring W. V. SCHUPPEN en Verwerking van Landbouwprodukten-IBVL, P.O.Box 18. 6700 AA Wageningen Institute of Plant Bree- A. PH. DE VRIES ding AV. Lawickse Allee 166. Wageningen Institute for Storage and G. J. VAN LAARHOVEN Ir. Processing of Agricultural Research Worker Produce (IBVL)., Bornsesteeg 59-P.O.Box 18. 6700 AA Wageningen

Boeslaan 17, R. P. LAMMERS Ir. Wageningen
P.O.Box 5, Peter R. DYKHUIS Ir. 9664 ZG, Wehe-den Hoorn

Comparing different methods of selection for yield and/or protein content, especially index and phenotypic selections for seed yield per plant.

- 1. Effect of variety selection and growing c mitions on protein yield, quality and processing suitability of field beans and other pulses.
- 2. Production of protein isolates and concentrates from pulses (Vicia faba).
- 3. Protein concentration from pulses *Vicia* faba by means of milling and air-classification 4. Processing of protein from pulses *Vicia* faba into produce for human and animal consumption.
- 5. Harmful factors in, and the quality of proteins from, Vicia faba and other pulses.
- 1. Study of field beans (small grains). Early growth, pods at least 30 cm above ground, pods showing same time of ripening.
- 2. Breeding for silo purposes.

INSTITUTE AND ADDRESS	NAME	QUALIFICATION & POSITION	RESEARCH INTERESTS
POLAND			
IUNG	B. NOWAKI	Ph. D.	
Department of Biochemistry and Physiology of Cultivated Plants, 24–100 Pulawy		•	
Plant Breeding and Accli- matization Institute, Radzikow, P,O.Box 1019 OO-950 Warsaw	Stanisaw STARZYCKI	Professor Director	
PORTUGAL			
Director Regional do Riba- tejo e Oeste, Rua Damas- ceno Monteiro 77 A/D, <u>Lisboa</u> 1	Manuel FIGUEIREDO		
Gabinete de Botanica, Escuela Superior de Agrono mia, Tapada de Ajvda, <u>Lisboa</u> – 3	Miguel P. COUTINHO -	Professor	
Lisboa University, Faculdade de Farmacia Av. das Forcas Armadas, <u>Lisboa</u> – 4	Jose NASCIMENTO	Professor Chemist	Research work on raw materials of faba bean for food industry.
Estacio Agronomica Nacio- nal, Department of Gene- tics, 2780 <u>Oeiras</u>	Miguel MOTA	Ph. D. Chairman of the Depart- ment of Genetics.	Collection of germplasm, with the aim of saving the existent Portuguese forms for breeding purposes. Fut. Breeding for grain and protein production and resistance to Orobanche.
Estacao Agronomica Nacio- nal Biblioteca, Quinta do Marques, 2780 <u>Oeiras</u> SPAIN	Antonio J. TEIXEIRA	Ph. D.	
Cordoba University, Escuela Tecnica Superior de Ingeniero Agronomos (KTSIA), Departemento de Fitopa- tologia, Apartado 246, Cordoba	Rafael JIMENE-DIAZ .	Professor of Phytopatho- logy.	Diseases of faba bean.
Cordoba University, Escuela Técnica Superior de Ingenieros Agrónomos (ETSIA), Departamento de Genetica, Apartado 246, Cordoba	Jose I. CUBERO	Professor of Genetics	Water and Soil science, phytopathology (incl. Vicia faba), plant physiology, microbiology, botany and industrial processes, as well as research listed below. 1. Genetics of qualitative characters. 2. Genetics of quantitative characters. 3. Cytogenetics: tetraploidy and trisomy. 4. Breeding: yield, type, resistance to Orobanche, use of primitive forms. 5. Systematics/evolution.

			 Put.As above, also. 1. Mutation: obtaining new forms. 2. Protein content/quality.
	Jose A. GONZALEZ	M. Sc.	 Genetics of quantitative characters. Cytogenetics: tetraploidy and trisomy. Fut.Mutations: Obtaining new varieties.
	Antonio DE HARO	M. Sc.	Genetics of quantitative characters. Fut.Protein content/quality.
	Antonio MARTIN	Assistant Professor of Genetics.	 Genetics of qualitative characters. Cytogenetics of quantitative characters. Breeding: yield, type resistance to Orobanche, use of primitive forms. Fut. Mutations: obtaining new varieties.
	Toro Appel DADILLA		
	Jose-Angel PADILLA	Technician	
Instituto Nacional de In-	Amparo MARTINEZ		1. Genetics of qualitative and quantitative
vestigaciones Agrarias, Centro Regional de Andalu- cia (CRIDA 10), Apartado 240, <u>Cordoba</u>	Maria-Teresa MORENO	Ph. D. Head of the Legume Prog- ram.	•
	Maria-Jose SUSO	M. Sc. in Biology	
Estacion Experimental del Zaidin, CSIC, Granada	Jose OLIVARES	Ph. D. Head of Microbiology Dept	Sulphur and nitrogen fertilization.
Ciudad Universitaria, Escuela Technica Superior de Ingenieros Agronomos, Madrid - 3	Joaquin M. DK ONIS	Professor	
Instituto Nacional de Investigaciones Agrarias, Departamento de Cereales, y Leguminosas, CRIDA 06, Finca "EL Encin", Apartado 127, Alcala de Henares, Madrid	Jose A. G. BARONA	M. Phil. Project Leader	Potential and limiting factors of the faba bean crop under dry conditions. Put.Plant breeding, selecting for high photosyn- thetic rates.
Instituto Nacional de Investigaciones Agrarias, CRIDA 06, Apartado 127, Alcala de Henares 9.	Jose L. MONTOYA	Ph. D. Head of Institute	a Ditable in
Instituto Nacional de Investigaciones Agrarias, Avda. Puerta de Hierro s/n Madri <u>d</u> – 3	Desiderio VIDAL	Ph. D.	Testing and inoculation of Rhizobium in Vicia faba.
Pamplona University, Seccion de Nutricion Anima Consejo Superior de Inves- tigaciones, Cientificas y Facultad de Farmacia, Pamplona.		Ph. D. 48	Physiological effects of Vicia faba ingestion.
		70	

INSTITUTE AND ADDRESS	NAME	QUALIFICATION & POSITION	RESEARCH INTERESTS
Instituto Nacional de Investigaciones Agrarias, Apdo 13, S. Jose la Rinco- nada, Sevilla	Manuel A. CHAMBER	Ph. D.	Isolation, testing and inoculation of Rhizo-bium leguminosarum spp. on faba bean cultivars from Southern Spain Fut.Obtain national and international Rhizobium leguminosarum collection tested for infection and N ₂ fixing efficiency.
	Rafael GONZALEZ		Plant breeding and field trials.
	R. ORIVE	Pḥ. D.	
	Juan F. PEREZ	Director of Legume Program.	Improvement of faba beans and chickpeas.
	Francisco TEMPRANO		Field trials on legume crops.
SWEDEN			
Svalöf AB S-26800 <u>Svalöf</u>	Gunnar NILSSON	Ph. D. Research Assistant	
Forage Crop Department, Svalof AB, S-26800 Svalof			Study of effects of selection for protein content and for the anti-nutritional substances: hemagglutins, antitrypsins and tannins.
	Jan SJÖDIN	Ph. D. Head of Forage Crop Dep.	Practical breeding of <i>Vicia faba</i> with special emphasis on yield capacity, earliness and seed quality. Research program on antinutritional substances in seed and vegetative parts. Fut.Relation between anti-nutritional substances and resistance to insects and pesticides.
SWITZERLAND			
Station Federale de Re- cherches Agronomiques de Changins, CH-1260, Nyon	Willy GEHRIGER	Ph. D.	 Cultural techniques. variety trials. winter hardiness test.
Bidg. Forschungsanstadt für Landw. Pflanzenbau, CH-8046, <u>Zurich</u>	W. HUBER		
Institute für Pflanzenbau, Universitätstrasse 2, CH-8092.			Analysis of physiological factors influencing yield and yield stability.
Zurich	E. R. KELLER	Ph. D.	 Crop physiology, i.e. analysis of different yield components in relation to plant density with or without application of growth regulators. Application of growth regulators with the intention of manipulating the flow of assimilates (higher yields, yield stability). Fut. Continuation, with one or more growth regulators (synergistic action). Meristematic tissue and its culture.
	A. SOLDATI	Ph. D.	

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UNITED KINGDOM			
Commonwealth Bureau of Nutrition, Rowett Research Institute, Greenburn Road,		Ph. D. Head, Dept. of Chemical and Physical Analysis.	The nutritive value of field beans (<i>Vicia faba)</i> for laying hens.
Bucksburn, Aberdeen	D. L. DUNCAN		
AB2 98B, Scotland.	V. R. FOWLER	Ph. D.	
	E. MELLINGER	Ph. D.	•
	E. MILLER	Ph. D.	
	A. A. WOODHAM	Ph. D. Director of Bureau.	Collection and dissemination of information regarding nutritional value of faba bean.
North of Scotland College of Agriculture, School of Agriculture, 581 King Street, Aberdeen, Scotland.	Alison M. INNES I. McMARTIN		
Welsh Plant Breeding Sta., Plas Gogerddan, Aberystwyth, Wales.	David W. GRIFFITHS	Ph. D. Higher Scientific Office	Investigations of various anti-nutritive factors with particular reference to seed coat polyphenolics. Inter-and intra-varietal variation in protein content and quality.
	Dudley A. LAWES	Ph. D. Head, Arable Crops Breeding Department.	 Breeding and development of improved varieties of spring field beans with emphasis on earliness, determinate habit and improved seed yield quality. Physiological attributes of seed yield. Investigations into the possibility of increasing the effectiveness of Vicia faba Rhizobium symbiosis.
	L. R. MYTTON		
	NEWAZ		
Holliwell Seed and Grain Co. Ltd., Seed Growers and Merchants, Wye, Nr. Ashford, Kent, TN25 5BQ.	Wilfred S. HOLLIWELL	Director	Production and development of pure 'Threefold White' faba beans especially disease-free stocks. Fut.Development of beans for canning and deep freezing.
London University, Wye College, <u>Nr.Ashford,</u> Kent TN25 5ZH,	Geoffrey P. CHAPMAN	Ph. D. Lecturer, Plant Science Department.	Studies on the genetics and physiology of attributable growth habits in faba bean.
	John W. HANSFIELD	Ph. D. Lecturer, Biological Sciences Department.	 Studies on sources of resistance to chocolate spot and most diseases. Phytoalexin production by Vicia faba - esp. studies on elicitors of phytoalexin biosynthesis.
	W. E. PEAT	Ph. D.	
West of Scotland College of Agriculture, Cronin Building, Auchincruive, Ayr, Scotland.	J. POTTS	Ph. D.	
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INSTITUTE AND ADDRESS	NAME	QUALIFICATION & POSITION	RESEARCH INTERESTS
Dept. of Applied Biology, University of Cambridge, Pembroke Street, Cambridge CB2 3DX.	N. W. GALWEY	Ph. D.	
National Institute of	G. A. CROFTON	Ph. D.	Same as below.
Agricultural Botany, Huntingdon Road	J. L. EVANS		
Cambridge. England	J. HIGGINS		Study of morphology and taxonomy as it relates to distinctness and homogeneity.  Testing of cultivars of <i>Vicia faba</i> for addition to the U.K. National list EEC Common Catalogue.
Official Seed Testing Sta. Trumpington Road, Cambridge CB 30 LE England	, P.D. HEWETT	Seed Pathologist	Epidemiology and control of seed-borne diseases, particularly Ascochyta fabae.
Plant Breeding Institute Maris Lane, Trumpington Cambridge CB 2 2LQ			As below (for Bond) but also investigations on new plant models, including closed flower types and on the role of auto-fertility in yield of seed.
England	R. B. AUSTIN	Ph. D.	
	David .A. BOND	Ph. D. Field-bean Breeder/PSO	Breeding for improved yield and yield stability in winter beans (equina), spring horse (equina) and field beans (minor) by wide crossing, recurrent selection, and production of inbreds for construction of synthetic varieties.  Investigations on resistance to Botrytis fabas and to Aphis fabas.  Selection for combination of high protein content and high yield.  Selection of tannin-free types for both human and animal consumption.
	Graham J. JELLIS	Ph. D. SSO	Resistance to chocolate spot (Botrytis fabas) Fut.Resistance to Ascochyta fabas.
	George R. LOCKWOOD	N. Sc.	Appraisal and development of new plant models with altered source-sink. Relationships in spring and winter beans. Examination of the practicality of converting beans to obligate autogamy by combining autofertility and cleistogamy.
	G. TOYNBEE-CLARK	Ph. D. Breeder	Autofertility.
15 Cambridge Road, Girton, <u>Cambridge</u> CB3 OPN. England	Colin LEAKEY	Ph. D.	
J. D. Gillett and Son Ltd Old Market, Wisbech Cambridge England	i., Derrick N. GILLET	Ph. D.	Breeding.

Imperial College Field Station, Silwood Park, Ascot, Berks SL5 7PY, England Population dynamics of aphids on crop and wild hosts, with special reference to natural enemy action and host 'resistance'.
Forecasting of Aphis fabae.
Study of the role of crop spacing, mixed cropping and weeds in relation to insect pest abundance on Vicia faba.

M. E. CAMMELL

Ph. D.

Michael J. WAY

Professor of Applied Zoology.

Director of College.

Ecology and control of Aphis fabae and other bean aphids, especially:-

- 1. role of natural enemies.
- 2. forecasting and decision-making on control by chemical and other means.

Fut. As above, plus.

- study of causes of field-to-field variation in A. Fabae infestations.
- 2. overwintering success, especially in relation to active stages as distinct from eggs.

Newsham Farm Estate 80A Druridge Drive, Blyth, Northumberland England Abdelwahab GHOBASHI

M. H. ROGERS

Librarian

Sussex University,
The Institute of Development Studies (IDS),
Andrew Cohen Building,
Falmer, Brighton BN 9RE
England
Long Ashton Research Sta.

England
Long Ashton Research Sta.,
Long Ashton,
Bristol BS18 9AF,
England

Daniel P. BARRATT Ph. D.

Dennis G. HILLCOTTING- Ph. D., FRSC HAM

Hilary J. CROMPTON

Gerald A. HUDD LRSC

C. LLOYD-JONES C. Chem., FRSC

P. N. WHITFORD

Study of the basic biochemistry and physiology of the crop in order to give information relevant to the breeding of stable, high-yielding cultivars. Studies include: formation of photosynthates and relative contributions of soil and atmospheric N; examination of significance of CO₂ dark fixation and evolution of hydrogen gas in the fixation of atmospheric nitrogen by the nodules.

Protein quality and quantity of seeds, including genotype identification by biochemical methods.

Determination of the relative contributions of soil and atmospheric nitrogen and the forms in which N is translocated within the plant.

To determine the uptake of ¹⁴co₂ and the pattern of distribution of labelled photosynthates, with particular empl sis on the carbon supply to developing fruits and nodules.

To determine any variation in nitrogen fixation and hydrogen evolution from nodules associated with a range of bean cultivars inoculated with different strains of *Rhizobium*.

Th. use of  $^{14}\text{C}$  and  $^{15}\text{N}$  isotopes in studies of the nutrition and physiology of whole bean plants.

INSTITUTE AND ADDRESS	NAME	QUALIFICATION & POSITION	RESEARCH INTERESTS
Plant Breeding & Research Station, Churton Road, Farndon, Chester, CH3 6QP. England	Lewis REES	Ph. D. Forage Crop Agronomist	Trials of new varieties of field bean. Fut.Breeding.
Hedderwickhill Farm West Barns, Dunbar, Scotland	A. G. DEWAR		
A. Gibson & Sons (Animal Feeds), 22 Mains Road, Dundee, Scotland	A. GIBSON	·	
Dundee University Dept. of Biological Sci., Dundee DDI 4HN, Scotland.			All aspects of nitrogen fixation, especially with respect to effects of light, water stress salinity and low temperature.
	Andrew FYSON	BA Botany Postgraduate Research Assistant	Investigation into some effects of low temperature on nodule development and nitrogen fixation in field and lab grown Vicia faba (L) (subsp.equina and minor)
	J. I. SPRENT	Ph. D. Senior Lecturer	Relationships between nitrogen fixation, growth and yield.
Scottish Crop Research	P. A. GILL	Ph. D.	
Institute, Invergowrie, <u>Dundee</u> DD2 5DA, Scotland	Julian HARRISON	Ph. D. Project Leader	Epidemiology of Chocolate spot disease. In particular, investigation of the mechanisms involved in determining the rate of increase it lesion diameter at different atmospheric humidities.
	T. A. JONES	Ph. D.	
	H. M. LAWSON	Ph. D.	
	Donald K. MACKERRON	Ph. D. Research Scientist	Study of dry matter distribution within field-grown plants of <i>Vicia faba</i> with a view to understanding the limitations to the yield of seed.  Study of the influence of the light environment
			within the canopy on pod development and yield.
	C. E. TAYLOR	Ph. D.	
	-	Director	Field physiology, EEC cultivar trials, plant pathology and personal interest in nematode problems.
	H. TAYLOR	Ph. D.	
	Jones A. TEIFION	Ph. D. Principal Scientific Of- ficer.	Detection assessment of effects and control of seed-borne virus infection.
	R. THOMPSON	Ph. D.	Factors affecting the partition of assimilates between vegetative and reproductive growth, total dry matter production, compensation between components of yield, and artificial control of maturity.

Durham University Department of Botany Sci. Laboratories, South Road, Durham DH1 3LE England	Donald BOULTER	Professor Head of Department	Protein synthesis and control in legume seeds. Yield physiology. Legume evolution and nutritional quality. Breeding for yield stability.
	R. R. CROY	Ph. D. Senior Experimental Of- ficer.	Qualitative and quantitative characterisation of the storage proteins during development. Control of storage protein gene expression during seed development in gene mapping and sequencing.
	Irene M. EVANS	Ph. D. Senior Research Assistant	Protein content and quality.
	P. J. GATES	Ph. D.	
	N. T. HARRIS	Ph. D.	
	Jennifer YARWOOD	Ph. D.	
Bell Grange, East Linton East Lothian, Scotland.	E. JEFFREY		
Department of Agriculture and Fisheries for Scotland Chesser House, Gorgie Road, Edinburgh Scotland.	R. N. CROSSETT		
East of Scotland College of Agriculture, The Edinburgh School of Agriculture, West Mainsrd, Edinburgh EN9 3JG.	John C. HOLMES	Ph. D Head of Crop Advisory and Development.	The testing of new varieties of spring, horse and tick beans.
	T. JOHNSTON		
Scotland	M. J. NASH	Ph. D. Senior Lecturer	
Hill Farming Research Organisation, 29 Lauder rd., Edinburgh, Scotland	A. HAYSTEAD		
Poultry Research Center, King's Buildings, West Mains Road, Edinburgh, Scotland	J. M. McNAB	Ph. D.	
Scottish Agricultural Industries Ltd., 25 Ravelston Terrace, Edinburgh, Scotland	L. P. MURRAY		
Cambridge Agricultural Marketing Services, The Stag, Cornish Hall End, Finchingfield, Essex England	Christopher GREEN		1. Cultural aspects of winter spring sown beans under U.K. conditions. 2. Aspects of variances 3. Seed types (variety, introduction). Fut Completion of crop survey amongst U.K. growers
Scottish Agricultural	A. HOOD		(Dec. 1981).

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Scottish Agricultural Industries Ltd., 53 East High Street, Forfar, Scotland

A. HOOD

NSTITUTE AND ADDRESS	NAME	QUALIFICATION & POSITION	RESEARCH INTERESTS
Tenderson Brown Chemicals atd., Moat House, 14 Gala Park, Galashiels, Scotland	R. R. HENDERSON		
Strathclyde University,	K. M. CLEGG	Ph. D.	
Department of Food Sci. and Nutrition, 131 Albion St., Glasgow, Scotland	J. KARKALAS	Ph. D.	Primarily the study of pests and diseases, bu
Rothamsted Experimental Station, <u>Harpenden</u> , Herts.			also nutrition and agronomy.
England	R. BARDNER	Ph. D. Principal Scientific Officer	
Rothamsted Experimental Station, <u>Harpenden</u> , Herts A15 2JQ. England	A. J. COCKBAIN	Ph. D. Principal Scientific Officer.	<ol> <li>Virus diseases - virus characterisation, epidemiology, damage assessment and control.</li> <li>Virus vectors - identification, biology, control.</li> </ol>
	J. M. DAY	Ph. D.	
	M. DYE	Ph. D.	Soil microbiology
	K. E. FLETCHER	Ph. D.	
	D. C. GRIFFITHS	Ph. D.	
	David HOOPER	M. I. Biol. Principal Scientific Officer.	Studies on the biology of races of the stem nematode (Ditylenchus disaci) attacking Vicia faba.
	J. McEWEN	Ph. D. Principal Scientific Officer.	Organisation of a multidisciplinary team investigating factors limiting yield in relation to seasonal variation.
	R. J. ROUGHLEY	Ph. D.	Soil microbiology.
	Geoffrey A. SALT	Ph. D. Principal Scientific Officer	Diseases of roots and stem bases. Effects o fungicides and pesticides applied to seed, soil and foliage. Irrigation and other environmental factors affecting disease.  Fut. To work on winter sown beans. Effect on soil borne-diseases of growing different legumes more frequently in crop rotations.
	J. H. STEVENSON	Ph. D.	
RHM Research Ltd., The Lord Rank Research Cen- tre, Lincoln Road, High Wycombe England Bucks.			Co-operation with G.P. Chapman at Wye Colleg in breeding for a'determinate habit' and for miximum yield. Research on faba beans has covered animal and human feeding as well as breeding. Animal work: identification and quantification of improvements in nutritiona value caused by processing.  Breeding, multiplication and commercial sale of faba beans.
	G. D. BROWN		<ol> <li>Breeding for U.K. conditions.</li> <li>Assessment of animal feed value.</li> <li>Processing for human food use.</li> <li>Fut.Breeding for yield and disease resistance.</li> </ol>

	D. G	. EDWARDS	Ph. D. Head of Life Sciences.		
	A. D	. SIMPSON	Animal Feed Research Coordinator.	2	. Breeding for U.K. conditions. . Assessment of animal feed value. . Processing for human food use. reeding for yield and disease resistance.
	D. W	. JOYCE	Ph. D.	1 2 3	. Breeding for U.K. conditions. . Assessment of animal feed value. . Processing for human food use. reeding for yield and disease resistance.
Dalgety Spillers Agric. Ltd., Works Lane, Setchey, Kings Lynn, Norfolk, PE 33 OAU. England	J. H.	. GOSLING	General Manager		
The University, Department of Plant Sci., Agricultural Sciences Bldg Leeds LS2 9JT.	·,			r	nalysis of the effects of environmental va- iation on leaf growth and death, and on yield n Vicia faba.
England	J. EI	STON	Ph. D. Professor of Crop Science	1 2 d 3	Description and analysis of growth of eaves. Effects of salinity, temperature and humiity on leaf growth. Water relations of field beans. evelopment of 3 above.
Agricultural Research Council, 160 Great Port- land St., London England	А. J.	PRITCHARD	Ph. D.		
Commonwealth Institute of Entomology. 56, Queen's Gate, <u>London</u> SW7 5JR	N. C.	PANT	Ph. D.		
England					
Ministry of Agriculture, Fisheries and Food, Great Westminister House, Horseferry Rd., London SWIP 2AE. England	D. A.	JONAS	Ph. D. Senior Scientific Officer	U	se of faba bean for human food.
Nottingham University, Dept. of Agr. and Horticul ture, School of Agricultur Sutton Bonington, Loughborough, Leics. LE12 5RD. England	_	HEBBLETHWAITE	Ph. D. Senior Lecturer in Agro- nomy.	CE	tudies on the effect of growth control chemials on the growth, development and yield of inter sown Vicia faba.
University of Nottingham, Department of Physiology and Environmental Studies, School of Agriculture, Sutton Bonington, Loughborough, Leics. LE12 5RD, England	T. F.	HERING	Ph. D. Senior Lecturer in Plant Pathology.	fa re	cudy of conditions for infection of Vicia that by rust, Uromyces viciae-faba, with eference to temperature, leaf wetness, and eight quantity and quality.

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INSTITUTE AND ADDRESS	NAME	QUALIFICATION & POSITION	RESEARCH INTERESTS
Commonwealth Bureau of Pas- tures and Field Crops,	Peter J. BOYLE	Ph. D. Director of Bureau	
Hurley, Maidenhead. Berks. SL6 5LR England	Elizabeth M. VINCENT	Ph. D. Scientific Information Officer.	Editor of Faba Bean Abstracts.
East Anglia University, School of Development Studies, Norwich NR 4TJ. England	David GIBBON	Ph. D. Senior Lecturer. Director of Overseas Deve- lopment Group.	
John Innes Institute,	N. J. BERWIN	Ph. D.	
Colney Lane, Norwich NR4 7UH England	B. SHOAD	Ph. D.	
Newgrain Ltd., Moreton Mill, Moreton, Ongar, Essex England	D. I. LOW		
Commonwealth Bureau of Agricultural Economics, Dartington House, Little Clarendon Street, Oxford OX1 2HH England	J. O. JONES		
East of Scotland College of Agriculture, Crop Ad- visory and Development Unit, Bush Estate,	W. D. GILL	Ph. D.	Work on spring beans, sites and dates, sowing date, seed rate, spacing, fertilizer, weed control, diseases, pests; bean weavils and aphids, harvesting, drying, nutrient value and varieties.
Penicuik, Midlothian, Scotland.	D. A. LOCKHART		
East of Scotland College of Agriculture, Cleeve Gardens, Perth, Scotland.	G. M. BARTON		Work on spring beans, sites and dates sowing date, seed rate, spacing, fertilizer, weed control, diseases, pests; bean weavils and aphids, harvesting drying, nutrient value and varieties.
rerea, bootsand.	I. H. CLARK		As above
	J. B. RODGER		As above
	R. G. TATE		As above
	A. J. TAYLOR		As above
Processors and Growers Research Organisation, Great North Road,	Anthony BIDDLE	M. I. Biol. Technical Officer	<ol> <li>Seed problems (virus, fungus and nematodes)</li> <li>Root-infecting soil-borne fungi.</li> <li>Fut.Seed vigour.</li> </ol>
Thornhaugh, Peterborough PE8 6HJ.	Geoffrey P. GENT	NDA, MRAC Senior Technical Officer	Variety evaluation (faba beans).
England	John KING	M. Sc. Principal Technical Officer.	<ol> <li>Control of Peronospora viciae.</li> <li>Pre-and post emergence weed control.</li> <li>Date of sowing experiments.</li> </ol> Fut.Seed vigour.
	Catherine M. KNOTT	AMI Agr. E. Technical Officer	Harvesting problems, machinery.

International Food Information Service (IFIS), Lanc End House, Shinfield Reading, RG2 9BB.	E. J. MANN		
Reading University, Department of Agricultu- ral Botany, Plant Science Laboratories Reading RG6 2AS, Berkshire		Ph. D. Senior Lecturer	Interrelation between carbon and nitrogen meta- bolism in water stressed plants of <i>Vicia faba</i> . 14CO ₂ uptake by leaves and its translocation to nodules is examined in plants given water stress by soil drying or by high evaporative demand. Acetylene reduction by nodules is also being examined.
	м. в. тана	Ph. D.	
Reading University, Dept. of Agriculture and	H. van EMDEN	Ph. D.	
Horticulture, Earley Gate, Reading RG6 2AT, Berks.	Eric H. ROBERTS	Professor of Crop Production.	Long-term storage of seed for genetic conservation.
Reading University,	F. R. MINCHIN	Ph. D.	
Dept. of Agriculture and Horticulture, Plant Envi- ronment Laboratory, Shinfield Grange, Shinfiel Reading RG2 9AD, Berkshire		Ph. D. Lecturer and Deputy Direc- tor.	General interest in <i>Vicia faba</i> physiology and adaptation to environment cf. other grain legumes.
BOCM Silcock Ltd Wright Street, <u>Renfrew</u> , Scotland.	A. B. HARKER		
Commonwealth Mycological Institute, Ferry Lane, Kew, <u>Richmond</u> TW9 3AF	A. JOHNSTON		
Royal Botanic Gardens Kew, <u>Richmond</u> , Surrey TW9 3AE.	R. M. POLHILL	Ph. D.	
Scottish Plant Breeding Station, Pentlandfield, <u>Roslin</u> , Midlothian, Scotland.			Mass selection of faba bean population for early maturity and determinate habit. Testing of material bred elsewhere for its suitability for cultivation in Scotland.
	1. M. CHAPMAN	Ph. D.	
	R. P. ELLIS	Ph. D.	
	A. M. HAYTER	Ph. D.	
	M. S. PHILLIPS	Ph. D.	
	R. N. WHITEHOUSE	Ph. D.	
Nickerson Seed Co. Research Station, Rothwell, Lincs.	G. W. MUMBY	<ul> <li>B. Sc.</li> <li>Crop Liaison for Vegeta-</li> <li>bles, Sugar beet, Peas Putand Beans.</li> </ul>	Vegetable bean breeding is being conducted in Holland (see Nickerson Zwaan). t.Breeding strategies for faba bean.
University of Southampton, Dept. of Biology, Building 44, <u>Southampton</u> , SO9 5NH			Aphid resistance, tissue culture, hybridisation, taxonomy, secondary chemicals, developmental physiology and cytology of legumes esp. Vicia, Phaseolus, Psophocarpus and Pisum

INSTITUTE AND ADDRESS	NAME	QUALIFICATION & POSITION	RESEARCH INTERESTS
	M. T. BABAC	M. Sc. Ph. D. Student	Storage, retrieval and analysis of chemotaxonomic data for the Vicieae.
	A. N. BIRCH	B. Sc. (Tech). Research Assistant	See No. 1. for R A. Bisby.
	Frank A. BISBY	M. A., D. Phil., F.L.S. Lecturer	1. Non-protein amino acid distribution and aphid resistance in the genus Vicia:— Screen of genus Vicia (wild vetches) for natural resistance to aphid spp. Aphis fabae, Acyrthosiphon pisum and Megoura viciae. Of special interest are V.narbonensis, V. hyaeniscyamus, V. galilaea, V. johannis, V. bithynica. Distribution of leaf non-protein amino acids within the genus Vicia, to provide chemotaxonomic information and to investigate their role in host plant defence mechanisms.  2. Antibiotic and antixenotic effects of Vicia faba cultivars on the pest aphids, Aphis fabae and Acyrthosiphon pisum.  3. As for T. D. Macfarlane below, and M. T.Babac above.
	P. K. EVANS	Ph. D.	
	Nazmul HAQ	Ph. D. Research Fellow	Development of varieties of <i>V. faba</i> for high protein content and disease and pest resistance by interspecific hybridization between <i>V. faba</i> and other species of <i>Vicia</i> . Assessment and evaluation of germplasm in <i>Vicia</i> fabae.
	J. HOLT	B. Sc. Ph. D. Student	See No. 2. for F. A. Bisby above.
	T. D. MACFARLANE	Ph. D. Research Fellow	$v_{icioae}$ Data-base project:- experiments with plant taxonomic services for the $v_{icioae}$ .
	D. A. MORRIS	Ph. D.	
	J. SMARTT	.a. D F.L.S. Senior Lecturer in F iology.	Interspecific relationships in Vicia.  Put.Study of nature of interspecific barriers between Vicia faba and other species of Vicia.
	R. J. WHITE	Ph. D. Senior Programmer.	As for T. D. Macfarlane above.
	S. D. WRATTEN	Ph. D. Lecturer	See No. 1 and 2. for F. A. Bisby above.
Stirling University, Biology Department, Stirling, Scotland	J. W. MANSFIELD	Ph. D.	·
Ministry of Agriculture, Fisheries and Food, ADAS, Drayton Experimental Hus- bandry Farm, Alcester Rd, Stratford-on-Avon, Warwicks. England	J. M. OLIPHANT	Ph. D. Agricultural Advisor	<ol> <li>Spring and winter bean variety comparisons.</li> <li>Observations on simazine and other herbicide alternatives.</li> <li>Residual effects of beans on subsequent winter wheats.</li> </ol>

National Vegetable Res. Station, Wellesbourne, Warwickshire, CV35 9EF England

Vicia faba used by soil scientists as a test crop for work on patterns of water extraction under different systems of cultivation; and by the Weed Section, who do routine screening of herbicides on the crop.

Richard	C.	HARDWICK	Ph.	D.	
			Rese	arch	Leader.

## WEST GERMANY

c/o Berlin Technical University, Fachbereich Internationale Agrarentwigklung FB 15, Institut für Nutzpflanzenforschung, Albrecht-Thaer-Weg 5, D-1000 Berlin 33 Drought stress in faba bean; salt tolerance in faba bean.

Influence of different salinity levels on mineral composition and uptake, protein content and yield of different faba bean varieties. The research program is linked with the Agronomy Dept. of Cairo University in Alexandria, Egypt, where there are field trials in saline

			soils with the same varieties.
	Jürgen CARLS	Ph. D. Coordinator, Food Legumes	
	K. CAESAR	Professor of Tropical and Subtropical Crops.	
	G. RUSITZKA		
	Wolfgang P. SCHROEDER	Diplom Agraringenieur Scientific Assistant	<ol> <li>Influence of temperature and light intensity on growth of faba beans.</li> <li>Influence of water supply on growth and yield of faba beans.</li> </ol>
Bonn University, Institut für Pflanzenk-	Marlene BLAESER	Ph. D. Assistant Professor	Pests and diseases of faba bean, esp. aphids.
rankheiten, Nussallee 9, 5300 <u>Bonn</u>	Richard SIKKORA	Ph. D.	
Bonn University, Institute for Fruit and Vegetable Research, Auf dem Herzel 6, 5300 Bonn	Tritz LENZ	Professor	Relationships between fruit growth and nodule activity. Stomatal behaviour, transpiration as affected by internal and environmental factors.
Bibliothek der Biologi- schen Bundesanstalt für Land und Forstwirtschaft, Messeweg 11/12, 3300 <u>Braunschweig</u>	W. KOCH	Ph. D.	Plant protection.
GTZ Project: Data Collection and Evaluation, c/o FAL, Bundesallee 50,	Klaus ROHRMOSER	Team Leader of GTZ.	Support of national research and training programmes. The GTZ field projects work on plant production in general.
D-3300 Braunschweig	SOMMER	Ph. D.	

INSTITUTE AND ADDRESS	NAME	QUALIFICATION & POSITIO	N RESEARCH INTERESTS
ICARDA, Research Support Group P,O.Box 5466, Aleppo	Rafíqui ISLAM	Ph. D. Microbiologist	
ICARDA, Training & Communications Program, P.O.Box 5466,	Habib IBRAHIM	Ph. D. Food Legume Training Officer.	<ol> <li>Faba bean physiology: plant ideotypes,</li> <li>leaf area techniques, hard seed processing.</li> <li>Training faba beam research workers.</li> </ol>
Aleppo	Richard STEWART	Ph. D. Science Writer	Coordination of FABIS, with ICARDA's docu- mentation group building up a collection of abstracts and reprints of articles on faba beans. Fut.Development of above projects.
ACSAD. P.O.Box 2440, Douma, Damascus	L. R. MOURSI	Ph. D.	
agric. Research Inst., Douma, Damascus	Abdel K. ARSHID  Basnir AL-WARAA	Ph. D. Director	
	Mohammed S. EL-MOTT	Ph. D.	
	Bollemod C. DD-MOIT	Legume Research Officer	
	Abdel S. TAWFIC	Ph. D. Deputy Director	
Izraa Agricultural Res. Station, Izraa, Cheack Maskeen Daraa	Ali A. ALI	B. Sc. Head of Legumes Section at Izraa Agricultural Research Station.	
Agricultural Res. Sta., Deir-El-Zor	Khader KERAR		
	Mohammed SALEH		
Agric. Research Station, Abd Alsalam Al-nabhani St. Al-Byad, Al-Mahta, Hamaa	Farouk YASSIN		
ICARDA, P.O.Box 507 Lattaquieh	Salim B. HANOUNIK	Ph. D. Plant Pathologist	Developing resistant cultivars for Ascochyta blight in faba bean and chickpeas, and also resistant cultivars for chocolate spot in faba bean. Handling disease screening nurseries at Lattaquieh and evaluating fungicides for these diseases, besides develo ping techniques in the production of epiphytotics of these diseases.  Fut.1. Research on root-rot complex in faba bean chickpea and lentil.  2. Setting up host differential sets in faba bean and chickpea for Ascochyta blight in faba bean and lentil.

Institut fur Pflanzenbau und Pflanzenzuchtung der Christian-Albrects-Univer- sitat, D-23 Kul, Olshausenter 40/60	Helmut HERZOG	Ph. D.	
Universitat Hohenheim, Landessaatzuchtanstalt, Postfach 700562, 7000 <u>Stuttgart</u> 70	Ernst von KITTLITZ	Ph. D.	Investigations on mating system, breeding methods and plant models. Development of high yielding synthetic cultivars.  Fut. Investigations on drought tolerance and disease resistance.
Landes Hessen Universitat, Gesamthochschule Kassel (GHK), Fachbereich 20, Landwirtschaft, Nordbahnhofstrabe, D-3430 Witzenhausen	Reinhold STULPNAGEL	Ph. D.	
YUGOSLAVIA			
Faculty of Agriculture,	Momcilo BOSKOVIC	Professor	
Akademska 2, 21000 <u>Novi Sad</u>	Milenko LAZIC	Professor	
Zemjoldelski Facultet, <u>Skopje</u>	Katarina BANDZO	Professor	
"Partenon" 11/4 Smederavska-Palanka ADDENDA	Zivorad R. NIKOSAVIC	Dipl. Ing. Director.	
Agric. Research Centre, Soil and Water Research Institute, Water Requirements R Section, Giza, EGYPT	Hakim W. TAWADROS	Ph. D. Head of Water Require- ments Res. Section.	Water requirements of faba bean.
Queen Margaret College, Clerwood Terrace, Edinburgh, Scotland , U.K.	Margaret P. WOODS		

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