



HORTEX NEWSLETTER

Volume 9 Number 3

July – September, 2009

A QUARTERLY PUBLICATION OF THE HORTICULTURE EXPORT
DEVELOPMENT FOUNDATION, DHAKA

Editor's Note

Different insects attack fruits and vegetables for their survival, causing substantial loss to yield and quality of produces. Sometimes the damage is so extensive that entire crop is lost. Farmers are compelled to apply insecticides to control insect pests. Wrong pesticides, over dosage, frequent application are responsible for environmental pollution and health hazard. There are reports that excessive application of pesticides over a long period to control a specific insect promotes its resistance and resurgence.

Now-a-days, the use of pheromone technology along with parasites and parasitoids is on increasing trend to produce horticultural crops free from pesticides. These crops have high demand both in domestic and export market, as consumers are becoming more health conscious.

Bangladesh Agricultural Research Institute (BARI) has developed a package of technologies using pheromone trap for different fruits and vegetables insects. Success stories in production of fruits and vegetables using insecticide free technologies are reported in different electronic and printing media. The fruit borer of cucurbits and shoot & fruit borer of brinjal are effectively controlled by this technology. The cost is about one third (BDT 10000/- per ha) than the conventional control of shoot and fruit borer of brinjal using insecticide. Different companies namely SAFE Agro, Ispahani Biotech and some others are marketing of sex pheromones, parasites and parasitoids for commercial use. So far we know, these companies are asking for registration to standardize the pheromones for sale which needs immediate attention of concern regulatory agencies.

Moreover, the research on identifying the sex pheromones assessing their effectiveness along with appropriate dosage and application procedure is to be strengthened for large scale use of pheromones to combat insect infestation in horticultural crops.

However, massive reduction in population density of harmful insects by mass trapping and disruption of mating using pheromone technology will improve productivity of crops and thereby make available insecticide free food for human consumption.

Pheromone based integrated insect pests management of horticultural crops

Bangladesh produces wide range of fruits and vegetables throughout the year, but it could not fulfill the optimum requirement of the country due to various constraints like low yield of production. Severe infestation of insect pests is considered as the most important factor for low production of fruits and vegetables. According to an estimate, annual yield loss due to insect pest alone is 25 percent for vegetables and 30 percents for fruits. Farmers of our country are mostly depending on the toxic synthetic pesticides to combat with those pests attack. But in many cases the increasing and indiscriminate uses of synthetic insecticides have totally failed to control the pests. The intensity of insecticide application per unit area is highest in vegetables, especially in the high valued vegetables like brinjal, cabbage, cauliflower and cucurbit crops.



Pheromone trap in mango plants

Toxic pesticide application scenarios in fruit crops are more or less same like vegetables. Pesticide abuse widely practiced and sometimes no waiting periods used before harvest, consumers are inevitably exposed to high levels of pesticides and their residues in their diets. The situation is compounded by the fact that, unlike cereals, vegetables or fruits are often consumed soon after harvest and there is little time for the chemicals to degrade. Different crops especially vegetables and fruits are harvested and marketed without knowing any residue status. This is most

likely to cause serious health hazard to the consumers. Crops with thin skins or those eaten whole are the most risky for consumers. Moreover, the repeated applications have induced multiple resistances of different pests against various pesticides. Not only that, frequent use of toxic pesticides have induced the multiplication of population of many minor pests like whitefly, jassid, fruit borers, prodenia caterpillar, red pumpkin beetle, cut worm, red mite, aphids, viruses etc. and different fruit pests such as mango twig galls, mango fruit weevil, mango fruit borer, jack fruit borer, litchi mite, litchi borer, guava spiraling whitefly, guava fruit borer etc. Just before one decade none of those pests were considered as the major pests of vegetables or fruits.

To get rid from this measurable pest management system, we must have to develop some new avenues. One of the ways may be to develop eco-friendly, sustainable, socio-economic acceptable integrated pest management or IPM packages. It involves the integration of the most appropriate management strategies for pest control where sole dependency on pesticides can be avoided. In Bangladesh, scientists of Bangladesh Agricultural Research Institute (BARI) have already developed sex pheromone based IPM packages against several destructive insect pests of several horticultural crops.

Pheromones are naturally produced chemicals or blends of chemicals that elicit a behavioral response from a member of the same species. The word pheromone is derived from the Greek word pherein, to transfer, and hormone, to excite or stimulate. Pheromones are now becoming an important tool in IPM to suppress different insect pest population. In pest management it can be use to monitor the pest population and that can provide stakeholders with a potentially sensitive, selective and labour saving method of monitoring insect pests e.g., African armyworm, *Spodoptera exempta*. On the other hand it is also being used to control the insect pest population and that can be done by i) Mating disruption or by ii) Mass trapping e.g. Brinjal shoot and fruit borer (BSFB), Cucurbit fruit fly, Oriental fruit fly can be successfully controlled by mass trapping of male insects using sex pheromone. However, it has been observed that it is difficult to control a pest only by the application of a single tactics. In order to achieve sustainable result, it is necessary to develop complete and coherent packages of technologies that meet farmers' needs and completely replace the need for application of toxic chemical pesticides. The improved efficacy of mass trapping of brinjal shoot and fruit borer by pheromone observed when chemical insecticides were not applied in IPM fields. It happened due to an increased activity of natural larval parasitoid, *Trathalla flavoorbitalis*. On the other hand inundative release of two parasitoids, *Tricogramma chilonis* and *Bracon habetor* can reduce the brinjal fruit damage to less than 10% along with the pheromone mass trapping. IPM technologies to control some devastating insect pests of vegetables and fruits are presented as follows:

Developed pest management technologies for vegetable insect pests:

Brinjal (*Brinjal shoot and fruit borer*)

Shoot and fruit (BSFB), *Leucinodes orbonalis* Guen. is the most destructive pest of Brinjal. The yield loss caused by this pest has been estimated more than 85% in Bangladesh. Despite its seriousness, farmers rely exclusively on the application of chemical insecticides to combat BSFB, which has resulted in a tremendous misuse of pesticides in an attempt to produce blemish-free marketable brinjal fruits. Unfortunately even after repeated insecticide sprayings the farmers could not control the pest properly as the field population became resistance to the commonly used pesticides. However, BARI scientists have already been developed an effective and economic IPM package to combat the pest. IPM package:



Sanitation



Sex pheromone trapping

Sanitation: Weekly removal and destruction of pest-damaged shoots and fruits that harbor brinjal shoot and fruit borer (BSFB) larvae from the field.

Use of sex pheromone: Sex pheromone for BSFB (a combination of two chemicals) has been identified, synthesized, and is now commercially available to trap the male moths before they mate. BSFB pheromone lures (in a plastic tube) baited in a suitable trap, 'BARI trap'. Male moths are attracted to the trap, captured and killed. The pheromone lure hung through the center of the lid inside the trap in such a way that the lure is 2-3 cm above the water level of trap. The trap should be set just above the plant canopy. Bating should be started from 4-5 weeks after transplanting and continued till last harvest. A distance of 10 m² should be maintained between the traps. The pheromone plastic tubes (lures) should be changed at every 45-60 days.

Artificial release of bio-control agents: To proliferate the use of different bio-control agents, weekly release of two parasitoids should be done. The parasitoids are i) egg parasitoid, *Tricogramma chilonis* (@ 1gm parasitized eggs/ha/week) and ii) larval parasitoid, *Bracon habetor* (@ 1 bunker /ha/week).



No or minimum pesticide spray

Community approach: Community approach of the IPM package should be followed.

Cucurbit crops (Cucurbit fruit fly)

Crops: Bitter gourd, Sweet gourd, Cucumber, Tassel gourd, Ash gourd etc.

Cucurbit fruit fly, *Bactrocera cucurbitae*, is a devastating pest of different cucurbit vegetables. In Bangladesh, this pest has been a major problem for the farmers as they invade the crops in high populations and devastate the cucurbit crops. Due to its nature of damage it is very much hard to control this pest with insecticide. However, an effective and cheap management strategy against this pest has already been developed, which comprises of sanitation and use of pheromone mass trapping. *IPM packages:*

Sanitation: Collection and destruction of infested fruits along with larvae.

Pheromone bait trap: The pheromone, ‘cuelure’, which mimics the scent of female flies, attracts the male flies and traps them in large numbers resulting in mating disruption. Simple plastic containers developed by BARI scientists known as ‘BARI trap’ or popularly known as ‘Magic trap’ were used for deployment of the pheromones. The rectangular plastic container had around 3-liter capacity and 20-22 cm tall. A triangular hole measuring 10-12 cm height and 10-12 cm base was cut in any two opposite sides. The base of the hole should be 3 cm above the bottom. Water containing two-three drops of detergent should be maintained inside the trap throughout the season. Pheromone soaked cotton was tied inside the trap with thin wire. Fruit fly adults enter the trap and fall into the water and die. Water inside the trap should be replenished often to make sure the trap is not dry. Pheromone dispensers should be continued throughout the cropping season. The pheromone bait traps should be in the cucurbit field at a distance of 12-15m² starting from first flower initiation and be continued till last harvest.

Community approach: Community approach of the IPM package should be practiced.



Sanitation



Cuelure pheromone trap



Release of bio-control agents

Developed pest management technologies for fruit insect pests

Mango, guava, orange (Fruit fly)

Fruit fly, *Bactrocera dorsalis*, is a devastating pest of different fruits viz. mango, guava and orange. In Bangladesh, this pest became a major problem for the fruit farmers, orchard owners as they invade the crops in high populations and devastate the fruits at the matured stage. Due to its nature of damage it is very much hard to control this pest with insecticide. However, an effective and cheap management strategy against this pest has already been developed, which comprises of sanitation and use of pheromone mass trapping.

Sanitation: Collection and destruction of infested fruits along with larvae.

Pheromone bait trap: The pheromone, ‘methyl euginol’, which mimics the scent of female flies, attracts the male flies and traps them in large numbers. Simple plastic containers known as ‘BARI trap’ or ‘Magic trap’ were used for deployment of the pheromones. The pheromone soaked cotton was tied inside the trap with thin wire. Fruit fly adults enter the trap and fall into the water of the trap and die. Water inside the trap was replenished often to make sure the trap was not dry. The pheromone will be set during the fruit maturity period and continued till last harvest. The pheromone bait traps should be in the fruit orchard at a distance of 10-12 m².

Community approach: Community approach of the IPM package should be practiced.



Adult fruit fly, *B. dorsalis*



Pheromone trap

Research efforts have been unexpectedly slow and limited for the development of IPM technologies for horticultural crops. As a result, the availability of IPM technologies for horticultural crops lagged behind seriously for years, compelling the farmers to have no other option than to rely solely on pesticide use for pest control. Among the horticultural crops maximum IPM research and development works have so far been done on vegetables. On the other hand at present IPM technologies to manage insect- pest problems of fruits and flowers are very much scanty and no organized research has so far been conducted to develop IPM technologies of these crops. So, a holistic and sustainable way of integrated pest management is thereby needed for boosting country’s total vegetables, fruits, and flower production by reducing the pest management cost.

Obviously, the higher demand for horticultural crops and increased economic returns encouraged the farmers to bring more lands under those crops cultivation. Moreover, the demand for those crops reached beyond the boundary of the country as Bangladesh entered the vegetables and fruit export market. So, it is very much necessary to develop and use of eco-friendly, sustainable, socio-economic acceptable integrated pest management or IPM packages, which not only improve the production of fruits, vegetables and flowers in Bangladesh but also ensure the quality of those crops.

Dr. Syed Nurul Alam
Principal Scientific Officer
Entomology Division, BARI, Gazipur

Hortex News in brief

Addition of New Staff to NATP

Mr. Bazlur Rahman; Marketing Expert, two computer operators Ms. Lubna Farukee and Mr. Biplab Das, and two support staffs Md. Zahirul and Md. Rafi recently joined in Hortex under the Supply Chain Development Component of National Agricultural Technology Project (NATP).

Governing Body Meetings



74th Governing Body meeting

The 74th Governing Body meeting of Hortex Foundation held at its Conference Room on August 12, 2009 was presided over by Mr. C. Q. K. Mustaq Ahmed, Secretary, MOA and Chairman, Hortex Foundation. The meeting discussed and took decision on various important issues including confirmation of appointment of Managing Director, Hortex, recruitments of NATP staffs, approval of budget, annual plan and procurement of goods and services of Supply Chain Development Component of NATP.

Cool Chain Support

Hortex Foundation provided 59 round trips of cool chain transportation supports to 16 organizations to carry their agro and other allied products.

The organizations are: Momota General Stores, Associate Capsules Pvt. Ltd., Pharma Trade, Homebond Packers and Shippers Ltd., Trade Clippers Cargo Ltd., J. B. Trading Company, Dawn International, Golden Harvest Agro Industries, Transcom Food Ltd., Sea International, Bengal Meat, Agah International, Trade Abroad, Marine Gold, Janata Foods Ltd and Jems International.

Trial Shipment

Under Work plan 2009-10, Hortex Foundation provided 20 kg mango of BARI-2 variety to “Crown Fruits & Vegetables Export” for trial shipment to France. All mango samples were processed through hot water treatment in Hortex Foundation in presence of both AGM (Marketing) and AGM (Production) for better quality assurance and were packed in Hortex brand carton.

The recipient from Paris thanked the Crown Fruits & Vegetables Export and Hortex, appreciated the quality of mango in a nice pack. Prospect of mango export seems to be bright in France.

Seminars/Training Participation

During the period Hortex officials attended number of seminars, workshops, trainings and discussion meetings on various issues of agriculture and export related affairs. Some of them are as follows:

- NETP Seminar on “GSP Scheme of the European Union with emphasis on new EU proposal (Guideline, Compliance and Documentary Evidence)” at EPB on July 30, 2009.
- Distant learning training program on “e-Learning Course on Exporting Agrifood Products to Emerging Global Markets” at BRAC University, organized by APO, Japan, from Aug. 4 to Aug. 6, 2009.
- Workshop on improving Quality & Sales in the Horticultural Sector organized by BQSP, at Hotel Lake Castle, Gulshan, from August 5 to 6, 2009.
- WTO National Workshop on the Agreement on Sanitary & Phyto-Sanitary (SPS) Measures, at Foreign Trade Institute, organized by FTI and WTO Cell of Ministry of Commerce, from August 10 to 11, 2009.
- Meeting on agricultural marketing issues relevant to the project design of the SCDP, at Hotel Sheraton, on August 18, 2009.

- Workshop on Expanding Horticulture Export of Bangladesh, organized by Market Development Forum at Hotel Washington, Gulshan, on August 19, 2009.

Production and Marketing Advisory Services

During this period July to September 2009 advisory services were provided to 31 entrepreneurs, producers, NGOs, researchers, university students, govt. organizations on various aspects of production, post-harvest technology, processing, cool-chain transportation and marketing of horticulture crops at home and abroad. The notable among the recipients of such services are: ACI Foods Ltd., Agrarian Research Foundation, Aurora Agribusiness Company Ltd., Western Trading, Purobi Corporation, Bangla Milk Ltd., HMA Mushroom Ltd, DMD, International Shrimps Export Ltd, Agro Link, Protikhrit, Atan Agro Industries Ltd and W. BC.

New Publication

Hortex published two new brochures on Canker disease and export guide (both are in Bengali) which are available for distribution. They are as follows:

1. Fresh fruits & vegetables export guidelines; Md. Rafiqul Islam, AGM (Production), HF and Dr. S. M. Monowar Hossain, MD, HF; July, 2009.
2. Citrus canker disease management; Dr. S. M. Monowar Hossain, MD, HF and Md. Rafiqul Islam, AGM (Production), HF; July, 2009

Air Freight of Fresh Produce to Various Destinations

Major destination wise air cargo freight for the perishables by Biman Bangladesh Airlines in the form of SIP rates are given below:

Destination	Current SIP* for perishables
	Air Freight Tk/kg
Jeddah/Riyadh	89.60
Kuwait	87.50
Dubai	76.40
London/Paris	125.00
Singapore	77.80
Kuala Lumpur	45.20

Source: Biman Bangladesh Airlines, Cargo Department, October 25, 2009

* SIP : Special Inducement Price

** Air Freight

In addition to the base rate mentioned above, total freight includes Terminal Handling Charge, Scanning Charge and

Fuel Surcharge on per kg and Airway Bill charge on per consignment basis.

The rate is applicable for 500 kg or above for Jeddah / Riyadh, Dubai and 250 kg or above for Kuwait, Singapore, Kuala Lumpur, London and Paris. If the cargo weight is less than the above, rate will be higher.

National export scenario of fresh fruits & vegetables

In the year 2007-2008, Bangladesh exported highest quantity of fresh fruits and vegetables i.e. 33,626 tones and earned US\$ 69.12 million. But this positive trend could not continue during 2008-2009, which shown the absence of stability in controlling International market share. The export performance of last 10 years (Table 1) demonstrates that it was never stable and steady in particular trend.

Table 1: National Export and earning from fresh Fruits & Vegetables (1999 - 2009)

Year	National Export (MT)	Growth (%)	Value (million US\$)	Growth (%)
1999 – 2000	10,270	(-) 21.78	14.00	(-) 20.90
2000 – 2001	9,503	(-) 7.41	12.79	(-) 8.66
2001 – 2002	12,761	34.28	15.32	19.81
2002 – 2003	9,792	(-) 23.27	13.24	(-) 13.58
2003 – 2004	16,144	64.86	24.70	86.56
2004 – 2005	29,100	80.25	46.41	87.89
2005 – 2006	19,460	(-) 33.13	39.59	(-) 14.70
2006 – 2007	19,805	1.77	40.53	2.37
2007 – 2008	33,626	69.78	69.12	70.54
2008 – 2009	24,670	(-) 26.63	50.71	(-) 26.63

Source: Export Promotion Bureau (EPB)

The following reasons were mostly caused for declining export of fresh fruits and vegetables in last fiscal year (2008-09):

- World economic recession;
- High price of fruits and vegetables in domestic market;
- Limited air cargo space;
- UK restriction on cucumber and other cucurbits;
- DEFRA restriction on citrus import for canker disease.

NATP activities and progress

To commercialize Bangladesh agriculture, the focus of Supply Chain Development Component (SCDC) of National Agricultural Technology Project (NATP) is to integrate small and marginal farmers and agri-business enterprises into modern supply chains by promoting more equitable chain governance and market linkages, including local rural markets of selected commodities (aromatic rice, fruits, vegetables, flowers, poultry, dairy and fisheries). The supply chain development activities is being implemented in 10 Upazilas covering 10 districts out of 120 Upazilas selected for extension support component by NATP.

The SCDC started its activities on 25 March 2008 but actual activities has been started from October 2008 after joining of the experts and release of fund from IDA in August 2008. The present report deals with the up to date progress of activities made by the component. Out of 11, six national consultants already joined and remaining will join soon. They are working under the management of the Hortex Foundation. The progress has been made;

- Collected some baseline data on resources, agricultural production, post-harvest operations, sanitary and phytosanitary issues, marketing and specific technologies for special areas etc through reviewing secondary information and field consultations/interviews with stakeholders from 10 Upazilas and developed a database for use during implementation of project activities.
- Completed selection of sub-sectors (crops, livestock and fisheries) and high value agricultural commodities for intervention
- Conducted a comprehensive Supply Chain Analysis in 10 Upazilas by the SCDC Team and the findings of this analysis was shared

with the stakeholders including the concerned officials of DAE, DLS, DOF, research organizations, NGOs and private organizations through organizing workshop to validate the findings.

- Identified Common Interest Groups (CIGs) comprising small, medium and large farmers of the locality selected by extension agencies (DAE, DLS & DOF). In total 200 CIGs (140 male and 60 female) comprising 4000 beneficiaries have been identified for intervention by the component.
- Completed preliminary selection of target market outlets for marketing of the produces of CIGs
- Developed documents on the present status of post-harvest handling practices in fruits and vegetables and developed program on demonstrations of low cost post-harvest technologies
- Identified the knowledge gaps and training need in post-harvest management of fruits and vegetables
- Prepared Training Manual, brochure and booklet on Post-Harvest Management of Fruits and Vegetables of Bangladesh has been prepared by the relevant expert of supply chain development component.
- Conducted study on the present status of quality assurance systems in traditional horticultural supply chain.
- Developed monitoring and evaluation tools
- Organized 20 training programmes and 14 workshops/seminars in different locations where around 1500 Upazila Agriculture Officers, farmers and other stakeholders participated in training and around 900 different officials attended in the workshop/seminars of SCDC under NATP.
- Prepared work plan for the next year (January-December 2010)

Upcoming International Food and Agricultural Events

CONGRESS 2010

Date: 12th January 2010 – 14th January 2010

Venue: Toronto Congress Center, Toronto, Canada

Description: Canada's International Horticultural Trade Show and Conference

Landbouw Vakbeurs Assen

Date: 12th January 2010 – 14th January 2010

Venue: TT-Hall, Assen, Netherlands The

Description: Agricultural Trade fair

Interaspa

Date: 13th January 2010 – 14th January 2010

Venue: Messegelände, Hannover, Germany

Description: Trade Fair for Asparagus, Vegetables, Berry-Fruits and Direct Marketing

Swiss Expo 2010

Date: 14th January 2010 – 17th January 2010

Venue: Beaulieu Lausanne, Lausanne, Switzerland

Description: Agricultural Exhibition

International Green Week Berlin 2010

Date: 15th January 2010 – 24th January 2010

Venue: Messegelände Berlin, Berlin, Germany

Description: Exhibition for the Food Industry, Agriculture and Horticulture.

Virginia Farm Show

Date: 19th January 2010 – 21st January 2010

Venue: Augusta Expo Land, Fishersville, USA

Description: Agricultural Trade Show

Fresh Food Products Conference and Exhibition

Date: 20th January 2010 – 21st January 2010

Venue: Bolognafiere, Bologna, Italy

Description: Fresh Food Products Conference and Exhibition.

InterAspa 2010

Date: 22nd January 2010 – 23rd January 2010

Venue: Messe Bremen, Bremen, Germany

Description: Trade Fair for Cultivation and Marketing of Asparagus, Vegetables and Berry-Fruit.

AGROVINA 2010

Date: 26th January 2010 – 29th January 2010

Venue: CERM, Martigny, Switzerland.

Description: International Fair for Agro Technology.

IPM 2010

Date: 26th January 2010 – 29th January 2010

Venue: MESSE ESSEN, Essen, Belgium

Description: International Trade Fair for Plants.

Wholesale Market Price of Selected Fresh Produce in Selected UK markets

All prices quoted relate to stated pack weight and reflect the range of prices for class one produce prevailing on the day of collection as quoted by the selected market sources. All prices listed in pence.

Produce	Origin, Pack	Market	Median Price, GB (Range) Pence / pack
Bananas	Jamaica, 18 kg	New Covent Garden	1450 (100)
Carambola	Thailand, 4kg	Birmingham	700
Mangoes	Brazil, 10	Belfast	500
Lemons	Argentina, 18kg	Glasgow	2600 (200)
Limes	Mexico, 4.5 kg	Liverpool	1000
Grapefruit (Pomelo)	China, 12 kg	New Covent Garden	1100
Grapefruit (Red)	South Africa, 15 kg	Western International	1250
Lychees	Mauritius, 2 kg	New Spitalfields	250
Strawberries	UK, 250gm	Liverpool	65 (30)
Strawberries	UK, 500gm	New Spitalfields	100
Papaya	Malaysia, 5kg	Birmingham	650
Papaya	Cote d'Ivoire, 4kg	Liverpool	1000
Pineapples	Costa Rica, 7, each	New Covent Garden	120
Pineapples	Cote d'Ivoire, 8, each	Liverpool	625 (50)
Pomegranate	India, 16	Liverpool	625 (50)
Beans (Fine)	Kenya, 2 kg	Glasgow	525 (50)
Beans (Fine)	Kenya, 2 kg	Liverpool	575
Beans (French)	Kenya, Carton	Birmingham	500
Capsicum, Green	The Netherlands, 5kg	New Covent Garden	425
Cabbage, white	UK, 12.5 kg	Liverpool	350
Cauliflower	UK, 12	Bristol	420
Chillies, Green	Kenya, 1.8 kg	Liverpool	675 (150)
Chillies, Green	Thailand, 2 kg	Western Int'l	960
Chillies, red	The Netherlands, 5kg	New Covent Garden	700
Garlic	China, 10 kg	New Covent	950

Produce	Origin, Pack	Market	Median Price, GB (Range) Pence / pack
		Garden	
Garlic	China, carton	Belfast	800
Ginger	Thailand, 13.5kg	Liverpool	1500 (200)
Ginger	China, 13 kg	New Covent Garden	1700
Mushrooms	Oyster, UK, 1.5kg	Western International	700
Mushrooms	Cups / Buttons UK, 1.5 kg	New Spitalfields	460
Mushrooms	Shiitake UK, 1.5 kg	Western International	1100
Onion	Spain, 20 kg	Liverpool	550
Okra	Thailand, 2kg	Liverpool	850

Source: *Fresh Produce Journal UK, September 11, 2009*

REEFER TRUCK FOR RENTAL !!!

Three Reefer Trucks are available for rental at a very competitive price

- To maintain cool-chain, while transporting your fresh produce/product
- To ensure proper quality
- To store your produce/product in appropriate temperature (+ 15°C to -25°C)
- Capacity 3 ton
- Auto humidity control of fresh produce: up to 99%

For further details please contact:

(02) 9141331, 8123433

Admin Department, Hortex Foundation

EU Market Information

Importers of Fresh Produce in **Birmingham, UK**

Name and Contact details of the Importers
Pam Exotics Unit 59, Smithfield market, Pershore Street Birmingham, B5 6UN Tel: 01216666559, Fax: 01216666559 Email: parm@pamexotic.com
Minor Wierr & Willis 241 Wellington Road, Perry Barr Birmingham, B20 2QQ Tel: 01213444554, Fax: 01213314590 Email: chris.abram@mww.co.uk
Dunns Produce Ltd, 84-86 Birmingham Wholesale Market Markets Precinct, Pershore Street Birmingham, B5 6UN Tel: ++44 (0) 121 622 3076 Fax: ++44 (0) 121 622 2010 E-mail: dunnsproduce@yahoo.com
Biilwalla Ltd Smithfield Market, Market precinct, Pershore Street Birmingham, B5 6UN Tel: 0121624441 Fax: 01216226667 Email: ahmed@bidwalla@hotmail.com
Howe's Export Smithfield market, Mrket precinct, Unit 74 Pershore Street Birmingham, B5 6UN Tel: 01216222665 Fax: 01216222665 Email: Leroy@howesexport.co.uk
Sonali Supermarket 537, Coventry Road Birmingham, UK Tel: 121 773 8236
East West Link Co. 156, Old Park Road, Wednesbury Birmingham, UK Tel: 121 526 4841
HAT BAZAR Birmingham, UK Tel: 121 526 7375
SEA FOOD INT'L Smallheath, Birmingham, UK

Published by	: Horticulture Export Development Foundation (Hortex Foundation) 22, Manik Mia Avenue, Dhaka – 1207, Tel: 8123433, 9141331, 9125181, Fax : 9125181 E-mail: hortex@citechco.net , dchanda@hortex.org , Website: www.hortex.org
Advisor & Editor	: Dr. S. M. Monowar Hossain, Managing Director , Hortex Foundation
Associate Editor	: Dr. Debashish Chanda, Assistant General Manager (Marketing) , Hortex Foundation
Supported by	: Md. Rafiqul Islam, Assistant General Manager (Production) , Hortex Foundation
Composed & Printed by	: National Products , 22/1 Tonkhana Road, Dhaka-1000. Tel: 7171453. 7171459. Cell: 01711 544804