



Green, Organic Lifestyle in the Modern World

IFOAM – Organics International

The global umbrella body for the whole organic sector

People

800 member organizations in 125 countries worldwide

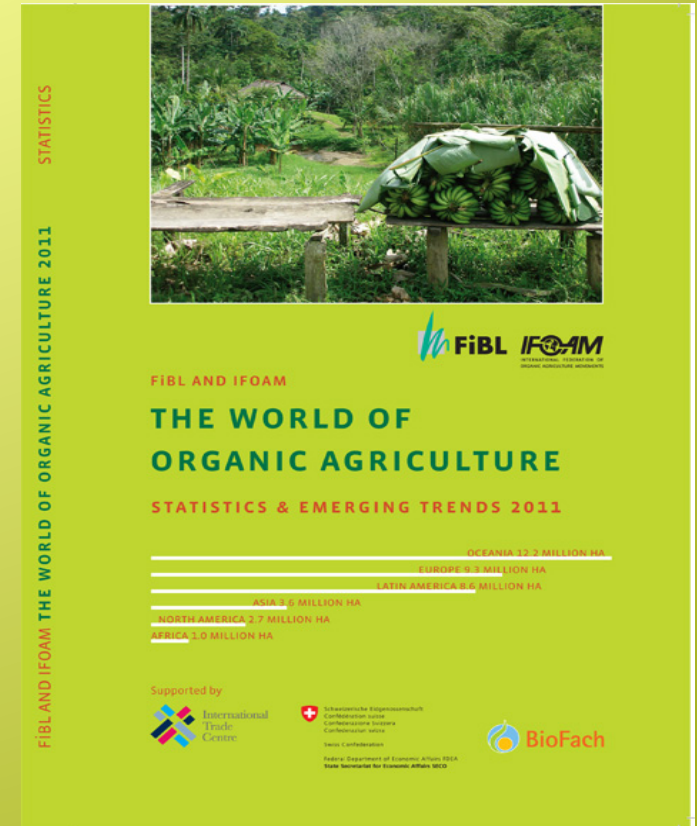
Organic Symposium
Bangkok, Thailand, July 29, 2016
Andre Leu, President

Organic Sector Growth

There is sustained growth all areas of the organic sector, despite the global economic downturn

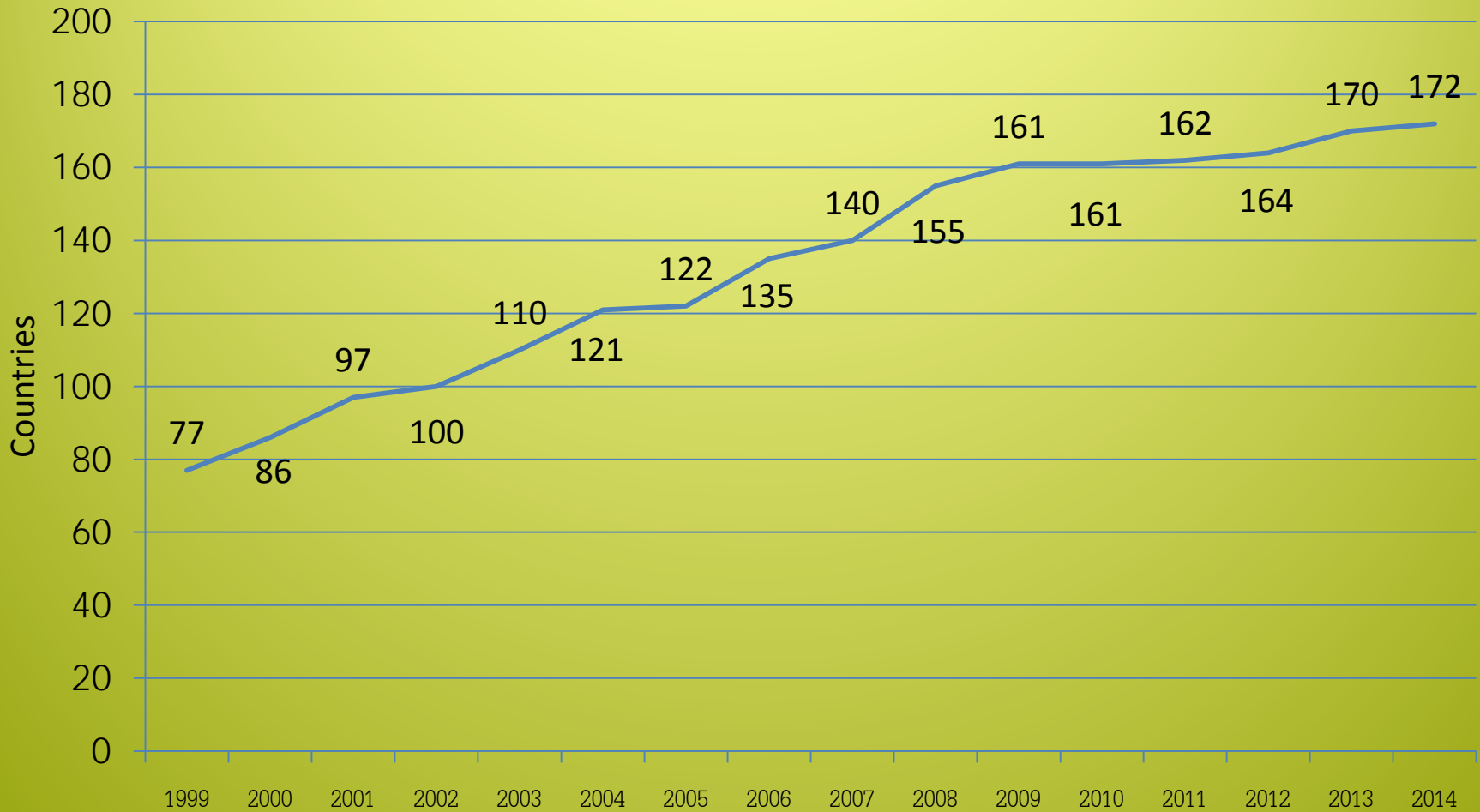
The current value is USD \$80 billion sales in certified organic products

IFOAM Organics International is a leader in this as our norms, such as the IFOAM Basic Standard which has been used as a reference document by many countries and organizations to develop certification systems that consumers trust



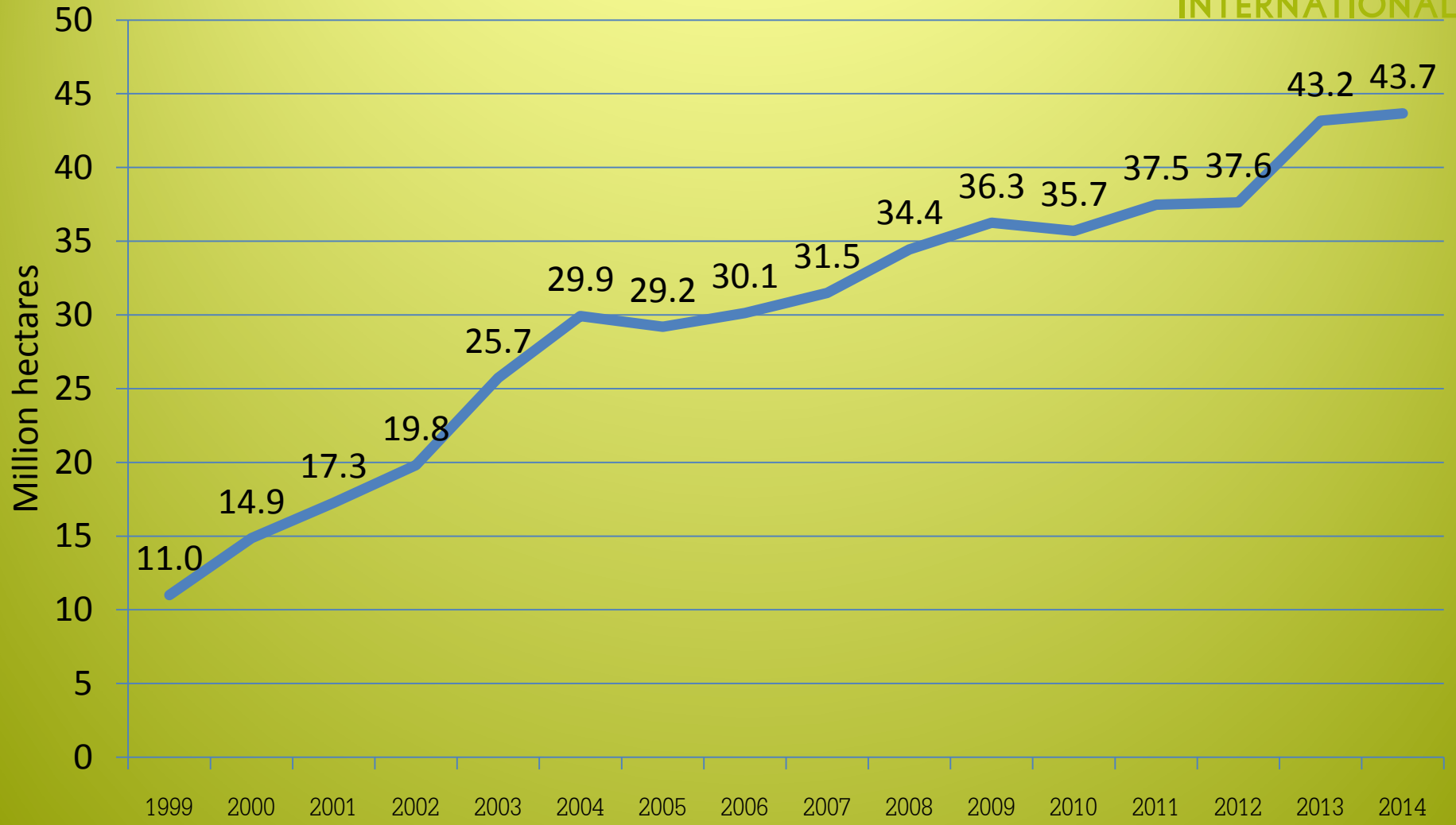
Development of the number of countries with data on organic agriculture

Source: FiBL-IFOAM-SOEL-Surveys 1999-2016



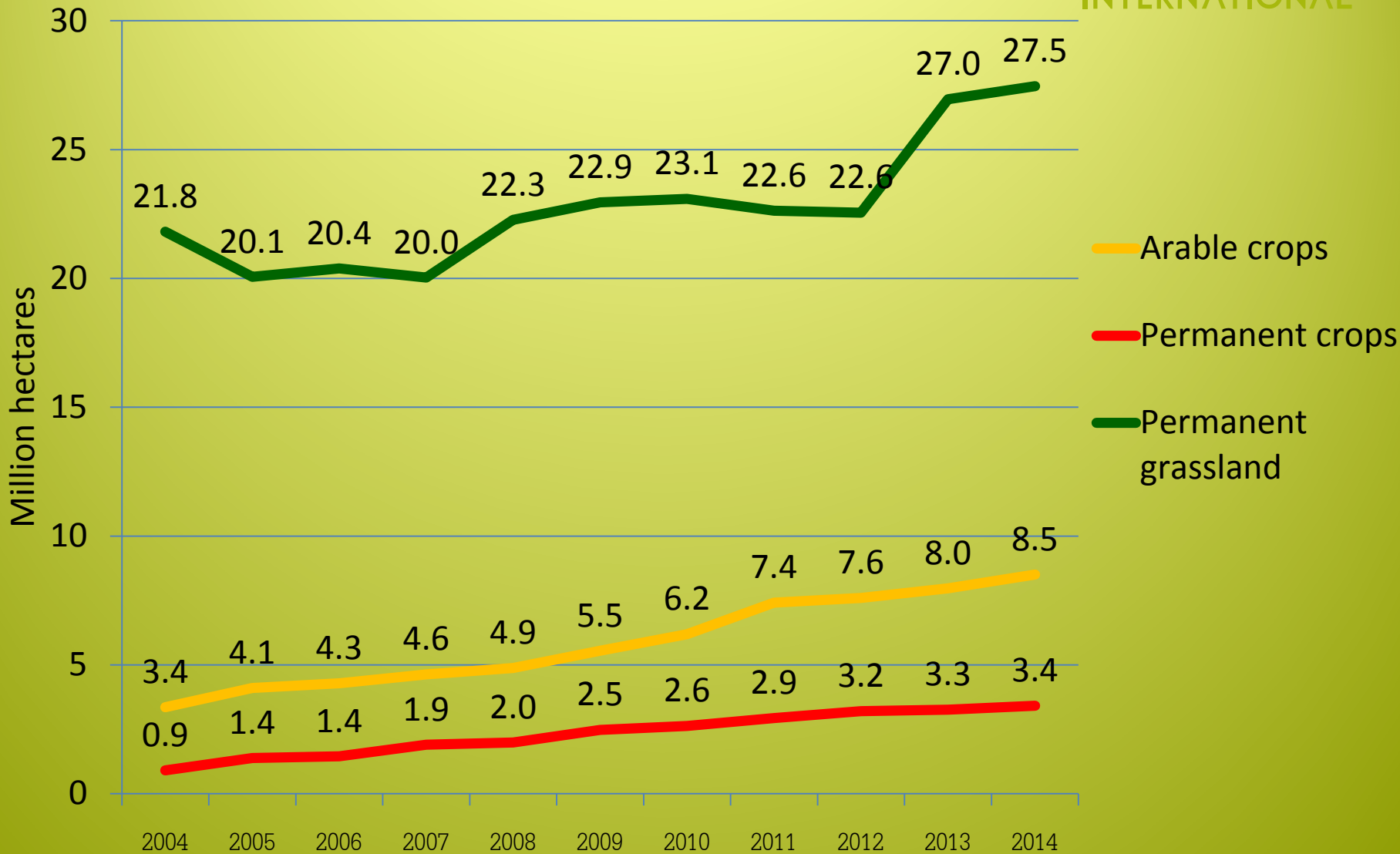
Growth of the organic agricultural land 1999-2014

Source: FiBL-IFOAM-SOEL-Surveys 1999-2016



Development of the organic land by land use type 2004-2014

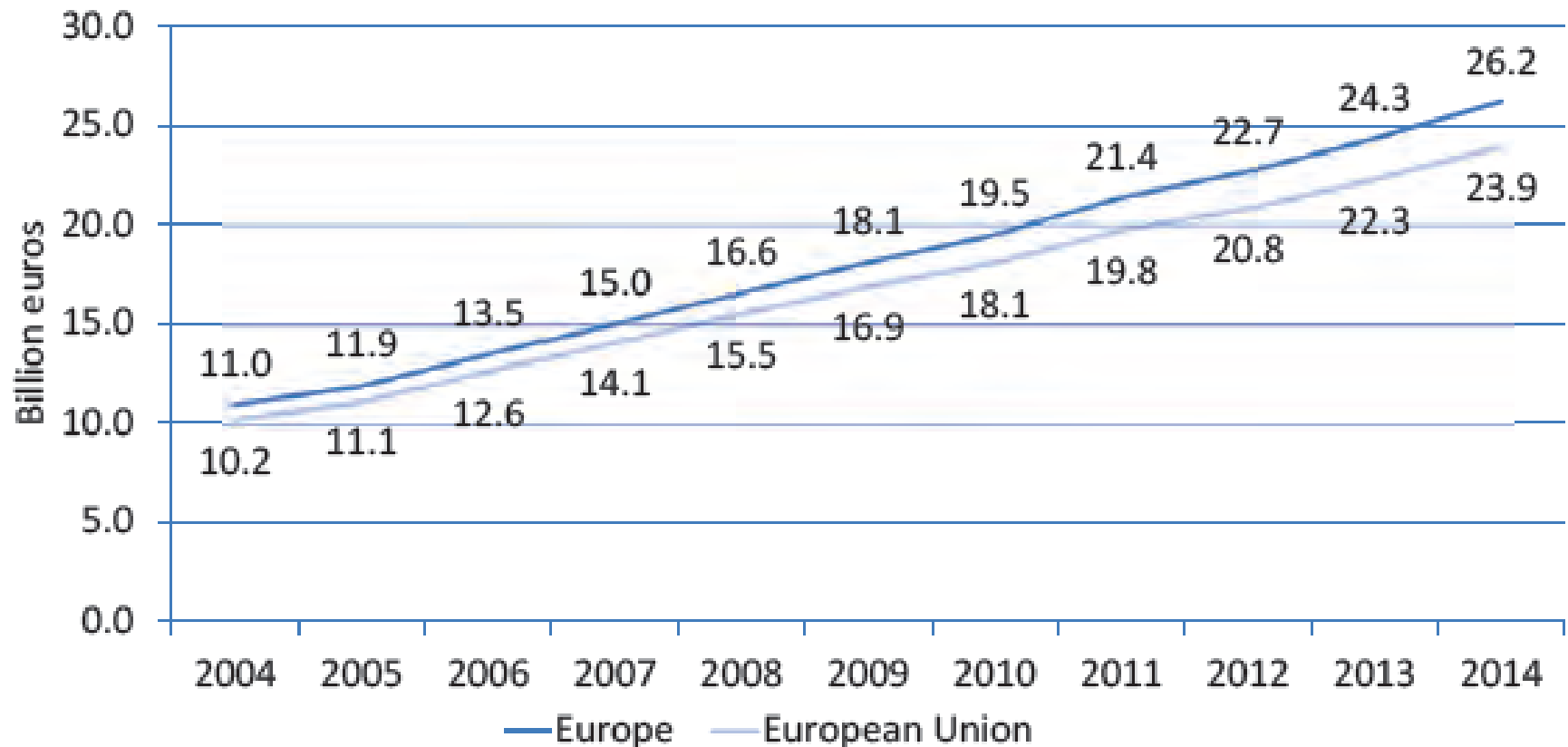
Source: FiBL-IFOAM-SOEL-Surveys 1999-2016



Organic Sector Growth

Europe and European Union: Market development 2004-2014

Source: FIBL-AMI Surveys 2006-2016, OrganicDataNetwork Surveys 2013-2015



Organic Sector Growth

Europe: Current Statistics

Europe and European Union: Development of organic producers 2000-2014

Source: Lampkin, Nic, FIBL-AMI Surveys 2006-2016, and OrganicDataNetwork Surveys 2013-2015, based on national data sources and Eurostat

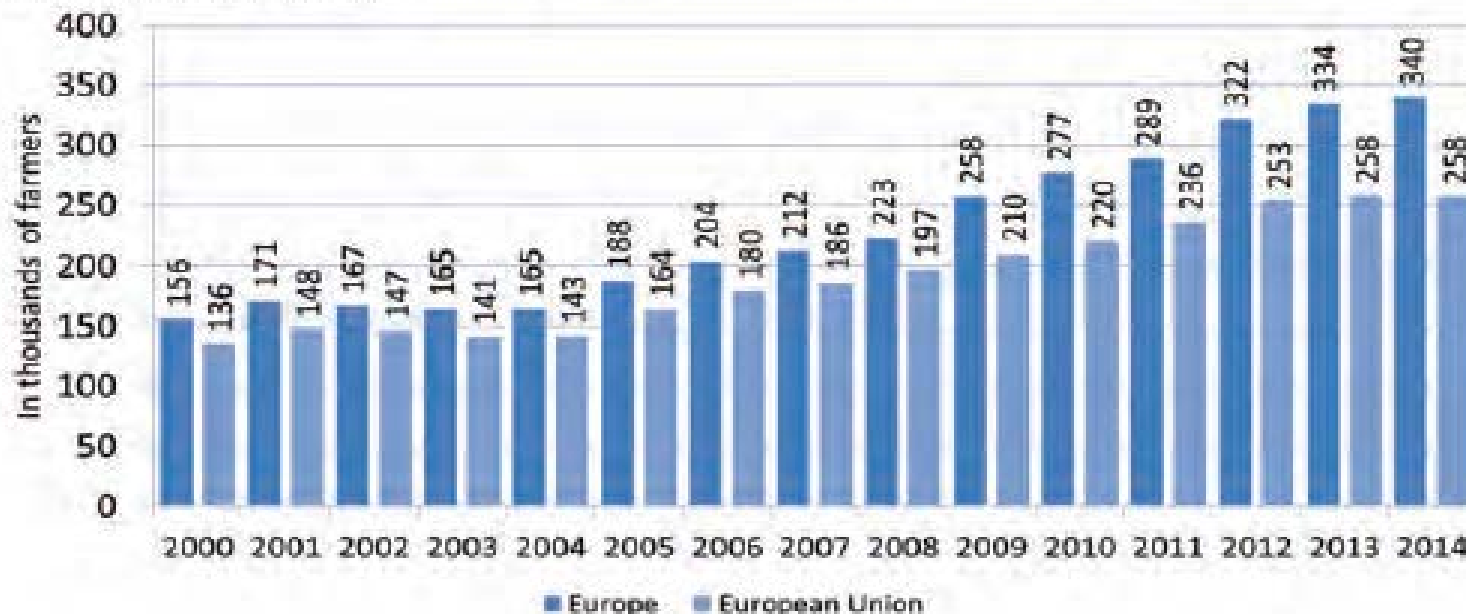


Figure 94: Europe: Growth of the number of producers in Europe and the European Union 2000-2014

Source: Lampkin, Nic, FIBL-AMI Surveys 2006-2016, and OrganicDataNetwork Surveys 2013-2015, based on national data sources and Eurostat

Organic Sector Growth

U.S.: Growth of retail sales of organic food 2004-2014

Source: Organic Trade Association (OTA), various years

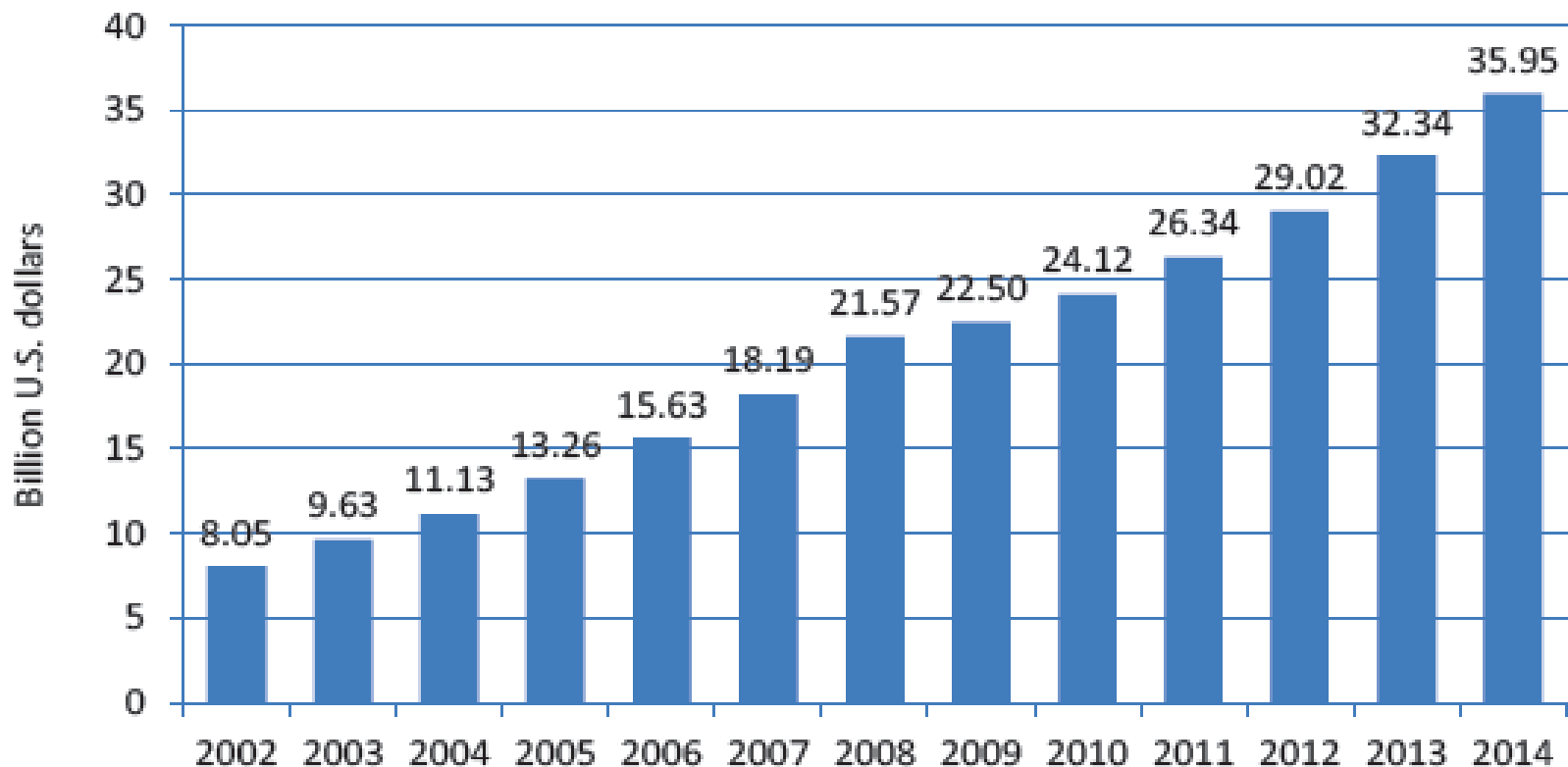


Figure 110: United States: Growth of organic retail sales 2002-2014

Source: Organic Trade Association, various years

Organic Sector Growth

Table 10: World: Development of the numbers of producers by region 2013 to 2014

Region	2013 [no.]	2014 [no.]	Change in numbers	Change in %
Africa	572'498	593'050	+20'552	+3.6%
Asia	726'325	901'528	+175'203	+24.1%
Europe	334'170	339'824	+5'654	+1.7%
Latin America	320'148	387'184	+67'036	+20.9%
North America	16'393	16'660	+267	+1.6%
Oceania	22'997	22'115	-882	-3.8%
Total	1'992'531	2'260'361	+267'830	+13.4%

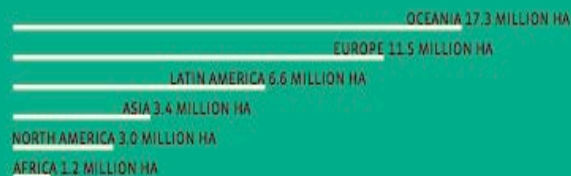
Source: FiBL survey 2016; based on information from the private sector, certifiers, and governments.
For detailed data sources see annex, page 315



FIBL AND IFOAM

THE WORLD OF ORGANIC AGRICULTURE

STATISTICS & EMERGING TRENDS 2016



Supported by



Federal Department of Economic Affairs,
Education and Research 2016
State Secretariat for Economic Affairs SIKO

Organic Agriculture 2016: Key Indicators and Top Countries

Indicator	World	Top countries
Countries with organic activities ¹	2014: 172 countries	New countries: Kiribati, Puerto Rico, Suriname, United States Virgin Islands
Organic agricultural land	2014: 43.7 million hectares (1999: 11 million hectares)	Australia (17.2 million hectares; 2013) Argentina (3.1 million hectares) US (2.2 million hectares, 2011)
Organic share of total agricultural land	2014: 0.99 % ²	Falkland Islands (Malvinas) (36.3 %) Liechtenstein (30.9 %) Austria (19.4 %)
Wild collection and further, non-agricultural areas	2014: 37.6 million hectares (1999: 4.1 million hectares)	Finland (9.1 million hectares) Zambia (6.8 million hectares) India (4 million hectares)
Producers	2014: 2.3 million producers (1999: 200'000 producers)	India (650'000; 2013) Uganda (190'552) Mexico (169'703; 2013)
Organic market size	2014: 80 billion US dollars (1999: 15.2 billion US dollars)	US (35.9 billion USD; 27.1 billion euros) Germany (10.5 billion USD; 7.9 billion euros) France (6.8 billion USD; 4.8 billion euros)
Per capita consumption	2014: 11 US dollars (14 euros) ³	Switzerland (221 euros) Luxemburg (164 euros) Denmark (162 euros)
Number of countries with organic regulations	2015: 87 countries	
Number of IFOAM affiliates	2015: 784 affiliates from 117 countries	Germany - 91 affiliates China - 57 affiliates India - 44 affiliates USA - 40 affiliates

Source: FiBL survey 2016, based on national data sources and data from certifiers
Global market: Organic Monitor 2016

The New Market Reality

Fortune Magazine
June 2015

CONSUMERS WANT FRESH AND ORGANIC—AND THAT COST THE MAJOR PACKAGED-FOOD COMPANIES \$4 BILLION IN MARKET SHARE LAST YEAR ALONE.
CAN THE GIANTS WIN YOU BACK?

BY
BETH KOWITT



The Drivers of Market Growth



The \$80 billion Organic Sector is Consumer Driven

- The main reasoning for purchasing is health – especially avoiding pesticides
- The authorities say that the pesticide residues in food are safe
- Therefore there is no need or value in purchasing and eating organic food
- This needs to be critically examined

Healthy Production Systems



The US President's Cancer Panel

80% of cancers are caused environmental toxins, especially chemicals and pesticides

Exposure to chemical cocktails

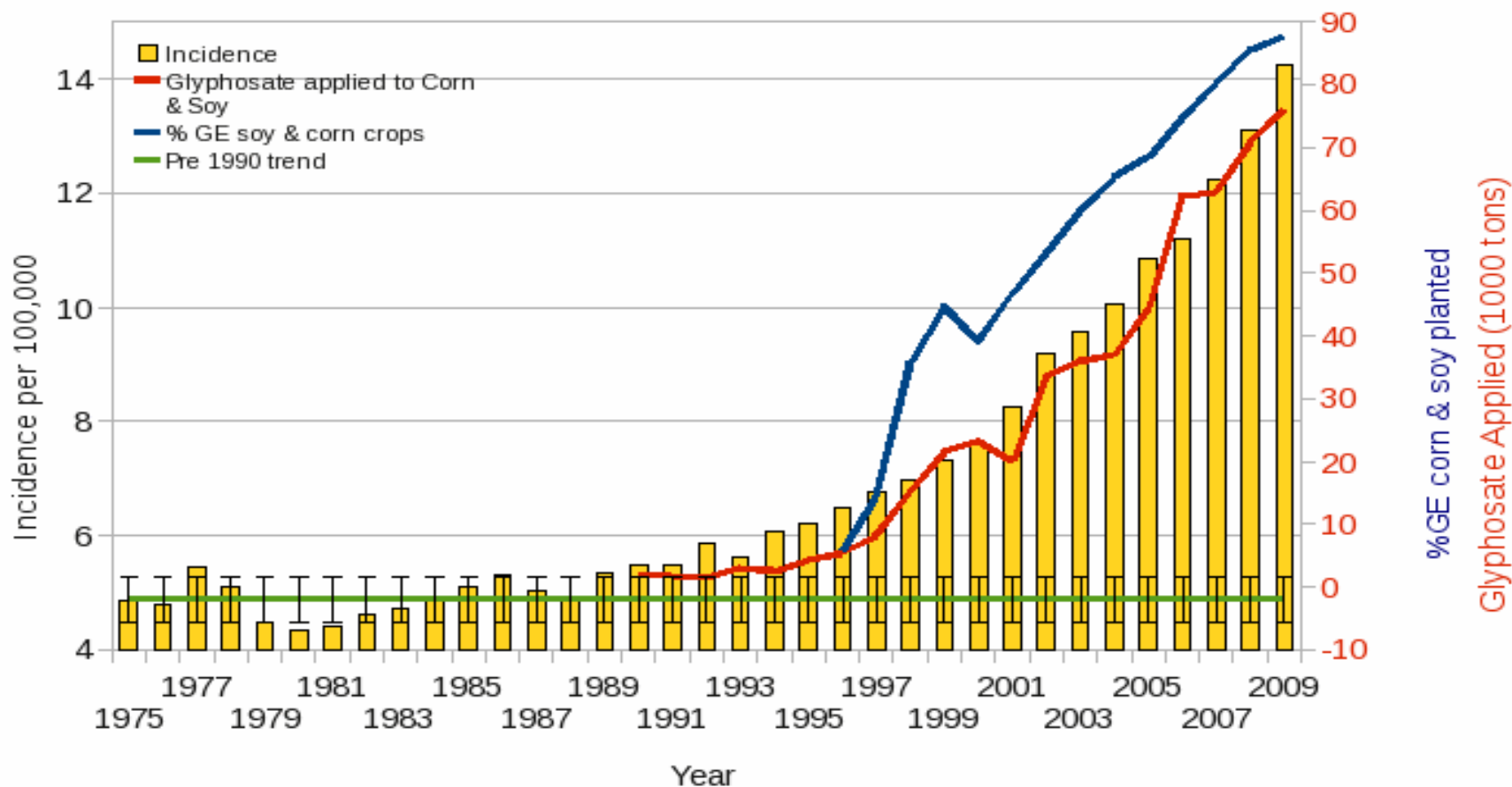
'...Leukemia rates are consistently elevated among children who grow up on farms, among children whose parents used pesticides in the home or garden, and among children of pesticide applicators.'

'Yet over the same period (1975–2006), cancer incidence in U.S. children under 20 years of age has increased.'

Are the current residues in food safe?

Thyroid Cancer Incidence Rate (age adjusted)

plotted against glyphosate applied to U.S. corn & soy crops ($R = 0.988$, $p \leq 7.612e-09$)
along with %GE corn & soy crops $R = 0.9377$, $p \leq 2.152e-05$
sources: USDA:NASS; SEER



The Myths of Safe Pesticides



Children, newborn and the fetus

The US President's Cancer Panel

'Children also can be harmed by genetic or other damage resulting from environmental exposures sustained by the mother (and in some cases, the father).'

'There is a critical lack of knowledge and appreciation of environmental threats to children's health and a severe shortage of researchers and clinicians trained in children's environmental health.'

Produce Non Toxic Safe Food



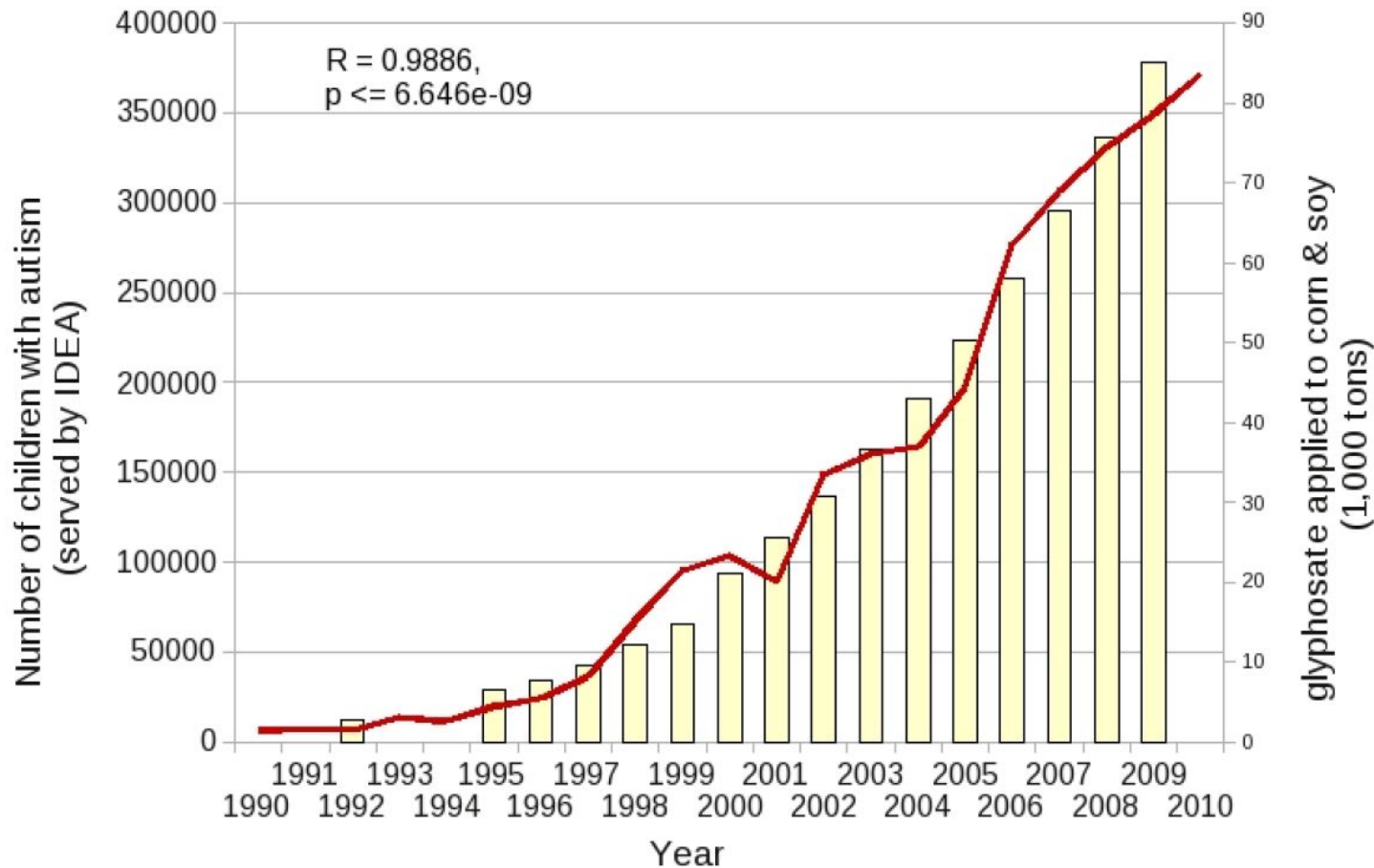
Pesticide exposure to the fetus and developing children causes:

- Lower IQs
- ADHD
- Autism spectrum disorders
- Lack of physical coordination
- Loss of temper – anger management issues
- Bipolar/schizophrenia spectrum of illnesses
- Depression
- Childhood obesity

Are the current residues in food safe?

Number of children (6-21yrs) with autism served by IDEA
plotted against glyphosate use on corn & soy

□ # w/ autism
— Glyphosate applied to
Corn & Soy



The Myths of Safe Pesticides



Children, newborn and the fetus

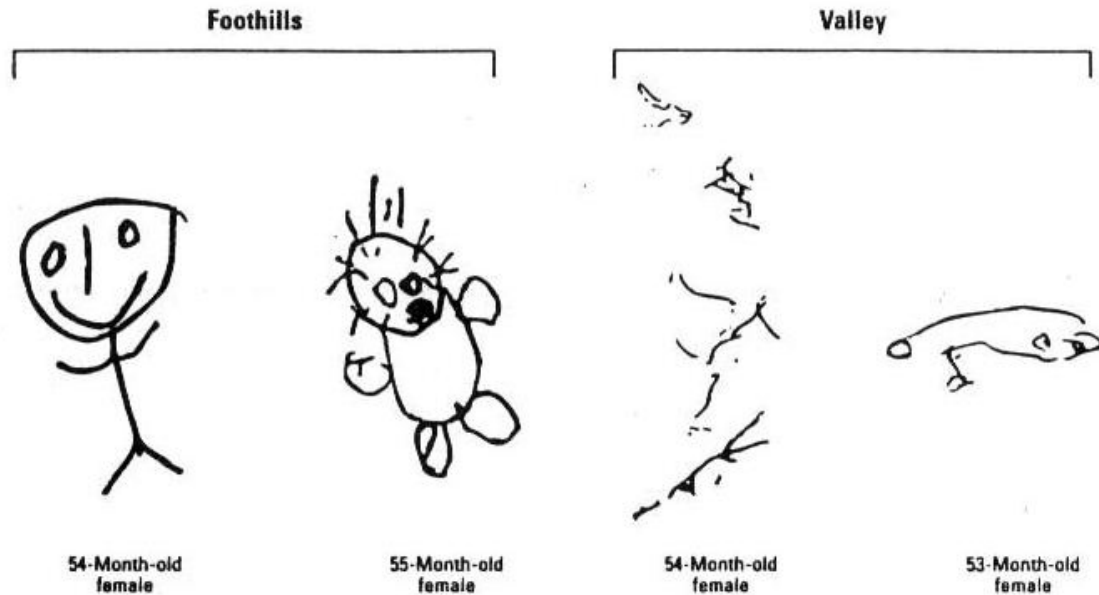
- Scientific research shows that pesticides effect the normal development of the nervous system in the fetus and children
- The fetus and newborn possess lower concentrations of protective of serum proteins
- The brain is the largest collection of nerve cells

‘These results indicate that chlorpyrifos and other organophosphates such as diazinon have immediate, direct effects on neural cell replication.’ (Qiao 2001)

The Myths of Safe Pesticides

PESTICIDE EFFECTS ON CHILDREN

Differences in drawing ability at the same age between exposed and unexposed children were astonishing



1. Representative drawings of a person by 4-year-old Yaqui children from the valley and foothills of Sonora, Mexico.

E. A. Guillette et al, "An Anthropological Approach to the Evaluation of Preschool Children Exposed to Pesticides in Mexico," *Environmental Health Perspectives*, 106(6):347-53, June 1998.

The Myths of Safe Pesticides



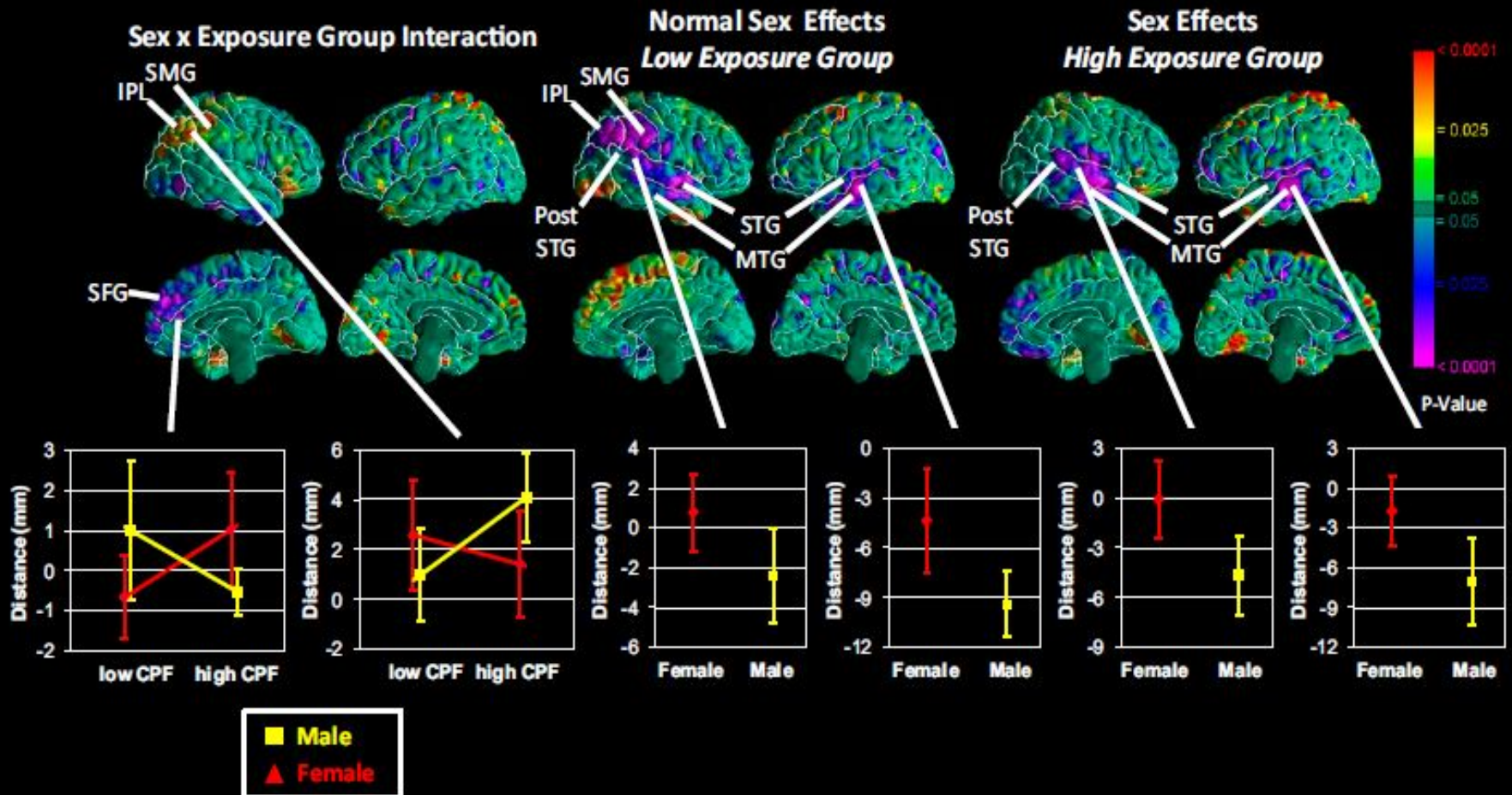
Children, newborn and the fetus

Four recent studies show that prenatal exposure to organophosphate insecticides (OPs) adversely affects the neurological development of children. (Rauh et al., 2011, Rauh et al., 2012, Bouchard et al., 2011, Engel et al., 2011)

- Parents should have considerable concern that the Columbia University study found that there was ***no evidence of a minimum level of exposure*** in the observed adverse impact on intelligence.
- Caused brain abnormalities in children who were exposed to chlorpyrifos in utero through normal non occupational uses – i.e. eating conventional food
- ***Most people get their exposure from residues in food***

Increasing Awareness about the Dangers of Pesticides to Children

Effects of CPF Exposure on Sexually Dimorphic Brain Regions



Thank You

