

## Editorial:

### KEY MESSAGES FROM EXPERIMENTAL AND CLINICAL SCIENCES

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In 2011 and 2012 EXCLI Journal has seen an enormous increase in submitted manuscripts, with a particularly high number of contributions studying compounds isolated from plants for antimicrobial as well as antioxidative activities. To give our readers an overview over recent developments we summarize the key messages of the 2011 publications in EXCLI Journal (Table 1).

**Table 1:** Key messages of the articles published in 2011 in the EXCLI Journal

Key message	Reference
Flavonoids and phenols of the tropical plant <i>Acalypha hispida</i> are responsible for the plants radical scavenging activity.	Onocha et al., 2011
The antidiabetic drug metformin reduces leptin resistance in polycystic ovarian syndrome which induces ovulation.	Upadhyaya et al., 2011
Stem bark extract from <i>Polyalthia cerasoides</i> shows antimicrobial activities.	Treeratanapiboon et al., 2011
IL-6 is a key factor mediating hyperalgesia in a rat model of arthritis.	Tekieh et al., 2011
Essential oils of the Nigerian plant <i>Psidium guajava</i> show antioxidative properties.	Fasola et al., 2011
Polymorphisms of GSTM1 and GSTT1 were not associated with pre-eclampsia in a case-control series.	Anvar et al., 2011
Impression materials for forensic odontology bite marks were evaluated showing high occurrence for vinyl polysiloxane.	Reddy et al., 2011
Oil of the Chinese plant <i>Blumea megacephala</i> shows antimicrobial activities.	Zhu et al., 2011
This study describes an improved method of bioethanol production.	Kuila et al., 2011
The sex ratio at birth was changed during war.	Saadat, 2011
A flavone glycoside was shown to have anti-inflammatory activity.	Su et al., 2011
This review summarizes analytical techniques to detect amphetamines in wastewater.	Mustapha and Ajao, 2011
Diclofenac caused more renal toxicity than meloxicam in a rat study.	Andalib et al., 2011a
Derivatives of anthranilic acid show antifungal activity.	Doungsoongnuen et al., 2011
The anti-ischemic compound trimetazidine alleviates lipopolysaccharide-induced oxidative stress in the brain and liver of mice.	Abdel-Salam et al., 2011a
This study quantifies the germination capability of <i>Tamarix ramosissima</i> seeds.	Yan et al., 2011
The metabolic response of rats to acute stress was not changed by high-fat.	Ghalami et al., 2011
This study gives an overview over the parasitic organisms in cockroaches in Thailand.	Chamavit et al., 2011

**Table 1 (cont.):** Key messages of the articles published in 2011 in the EXCLI Journal

Key message	Reference
Xeranthemum annuum was shown to have high concentrations of polyphenolic compounds with antimicrobial activities.	Stanković et al., 2011
A software for bacterial classification is introduced.	Nantasenammat et al., 2011
Peganum harmala extracts show antibacterial activity against multi-drug resistant bacteria.	Darabpour et al., 2011
Kigelia pinnata root oil extracts show antioxidant activity.	Atolani et al., 2011
Lobelia pyramidalis essential oil shows antimicrobial activity.	Joshi et al., 2011
Extracts of Acalypha wilkesiana show hepatoprotective effects in rats.	Ikewuchi et al., 2011b
The serotonin reuptate inhibitors fluoxetine, sertraline and fluvoxamine reduce lipopolysaccharide induced oxidative stress in livers of mice.	Abdel-Salam et al., 2011b
Linear chain aldehydes induce calcium responses in melanoma cells.	Ishikawa et al., 2011
Sansevieria liberica extracts protect from carbon tetrachloride induced hepatotoxicity in rats.	Ikewuchi et al., 2011a
This study demonstrates the role of the liver in leptin metabolism.	Habib et al., 2011
The review gives an update of adverse health effects of tobacco smoking.	Zainul, 2011
The article reviews the role of endocrine disruptors of testis development.	Egbowon and Mustapha, 2011
The review gives an overview over plant products used for treatment of insomnia.	Andalib et al., 2011b
This case report describes two cases of bronchiolitis obliterans after postoperative irradiation of breast cancer.	Inoue et al., 2011
A series of editorials gives an overview over cutting edge topics in toxicology: oxidative stress, hepatotoxicity, apoptosis, carcinogenesis, metal toxicity, neurotoxicology and regulatory toxicology.	Surendran, 2011; Hengstler, 2011; Marchan, 2011a,b; Godoy, 2011; Reif, 2011; Cadenas, 2011; Stewart, 2011; van Thriel, 2011; Bolt, 2011

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