



# INNOVAZIONI IN AGRICOLTURA

INNOVAZIONE:

Radio base stations placed on agricultural land. Evaluation of the workers' exposure.

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ISTITUZIONE:

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FRUITORI:

Farmers that work in the surrounding area of mobile phone radio base stations

IMPATTO ATTESO:

Not harmful effects caused by the exposure of the farm workers to the electromagnetic fields produced by radio base stations placed on agricultural lands.

DESCRIZIONE SINTETICA:

Exposure of farm workers to electromagnetic radiation from cellular network radio base stations

PAROLE CHIAVE:

cellular network, electromagnetic field, workers' exposure, EC Directive 2013/35

DESCRIZIONE DETTAGLIATA:

The number of the radio base stations (RBS) has increased in recent years in Italy, due to the rapid spread of mobile telephone technology. The analysis of the electromagnetic fields generated by RBS situated on rural-agricultural lands allows to evaluate the farm workers exposure in the surrounding area. These workers are generally unaware of their exposure and the potential risks, and are not trained to take appropriate precautions. The E-fields generated by some RBS operating in the GSM, UMTS and LTE bands and situated on agricultural land in the rural areas of Apulia (Italy) were measured.

Taking into account that the transmitted power is generally lower at weekends, the in situ measurements were carried out and recorded on day-time of working days. The results show that the actual E-field values in the direction of each aerial sector are significantly lower than the "Attention Value" in the current Italian Regulations even at a short distance from the antennas.



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BIBLIOGRAFIA

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